

SEQUENCE LISTING

Seq ID 1

| | | | | | | |
|------------|-------------|-------------|-------------|------------|-------------|------|
| atggttaatc | ctattggtcc | aggctcctata | gacgaaacag | aacgcacacc | tcccgcagat | 60 |
| ctttctgctc | aaggattgga | ggcgagtgc | gcaaataaga | gtgcggaagc | tcaaagaata | 120 |
| gcaggtgcgg | aagctaagcc | taaagaatct | aagaccgatt | ctgtagagcg | atggagcatc | 180 |
| ttgcgttctg | cagtgaatgc | tctcatgagt | ctggcagata | agctgggtat | tgtttctagt | 240 |
| aacagctcgt | cttctactag | cagatctgca | gacgtggact | caacgcacgc | gaccgcacct | 300 |
| acgcctcctc | cacccacgtt | tgatgattat | aagactcaag | cgcaaacagc | ttacgatact | 360 |
| atctttacct | caacatcact | agctgacata | caggctgctt | tggtgagcct | ccaggatgct | 420 |
| gtcactaata | taaaggatac | agcggctact | gatgaggaaa | ccgcaatcgc | tgcgagtggy | 480 |
| gaaactaaga | atgccgatgc | agttaaagtt | ggcgcgcaaa | ttacagaatt | agcgaaatat | 540 |
| gcttcggata | accaagcgat | tcttgactct | ttaggttaac | tgacttcctt | cgacctctta | 600 |
| caggctgctc | ttctccaatc | tgtagcaaac | aataacaaag | cagctgagct | tcttaaagag | 660 |
| atgcaagata | accagtagt | cccaggga | acgcctgcaa | ttgctcaatc | tttagttgat | 720 |
| cagacagatg | ctacagcgac | acagatagag | aaagatggaa | atgcgattag | ggatgcatat | 780 |
| tttgaggac | agaacgctag | tggaagctgta | gaaaatgcta | aatctaataa | cagtataaagc | 840 |
| aacatagatt | cagctaaagc | agcaatcgct | actgctaaga | cacaaatagc | tgaagctcag | 900 |
| aaaaagttcc | ccgactctcc | aattcttcaa | gaagcggaac | aaatggtaat | acaggctgag | 960 |
| aaagatctta | aaaatatcaa | acctgcagat | ggttctgatg | ttccaaatcc | aggaactaca | 1020 |
| gttgagggtc | ccaagcaaca | aggaagtagt | attggtagta | ttcgtgttct | catgctgtta | 1080 |
| gatgatgctg | aaaatgagac | cgcttcatt | ttgatgtctg | ggtttcgtca | gatgattcac | 1140 |
| atgttcaata | cggaatcc | tgattctcaa | gctgcccaac | aggagctcgc | agcacaagct | 1200 |
| agagcagcga | aagccgctgg | agatgacagt | gctgctgcag | cgctggcaga | tgctcagaaa | 1260 |
| gctttagaag | cggtcttagg | taaagctggg | caacaacagg | gcatactcaa | tgcttttagga | 1320 |
| cagatcgctt | ctgctgctgt | tgtagcgca | ggagttcctc | ccgctgcagc | aagttctata | 1380 |
| gggtcatctg | taaaacagct | ttacaagacc | tcaaatcta | caggttctga | ttataaaaaca | 1440 |
| cagatatcag | caggttatga | tgcttaca | ttccatcaatg | atgcctatgg | tagggcacga | 1500 |
| aatgatgcga | ctcgtgatgt | gataaacaat | gtaagtaccc | ccgctctcac | acgatccgtt | 1560 |
| cctagagcac | gaacagaagc | tcgaggacca | gaaaaaacag | atcaagccct | cgctaggggtg | 1620 |
| atttctggca | atagcagaac | tcttgagat | gtctatagtc | aagtttcggc | actacaatct | 1680 |
| gtaatgcaga | tcattccagtc | gaatcctcaa | gcgaataatg | aggagatcag | acaaaagctt | 1740 |
| acatcgccag | tgacaaagcc | tccacagttt | ggctatcctt | atgtgcaact | ttctaatagac | 1800 |
| tctacacaga | agttcatagc | ttaaattagaa | agtttggttg | ctgaaggatc | taggacagca | 1860 |
| gctgaaataa | aagcactttc | ctttgaaacg | aactccttgt | ttattcagca | ggtgctggtc | 1920 |
| aatatcggtc | ctctatatct | tggttatctc | caataa | | | 1956 |

Seq ID 2

| | | | | | | |
|-------------|------------|-------------|------------|-------------|------------|------|
| atgaaaaaac | tcttaaagtc | ggcgttatta | tccgcgcgat | ttgctgggtc | tgctggctcc | 60 |
| ttacaagcct | tgctgttagg | gaacccttct | gatccaagct | tattaattga | tggtacaata | 120 |
| tggaaggtg | ctgcaggaga | tccttgcat | ccttgcgcta | cttggtgcga | cgctattagc | 180 |
| ttacgtgctg | gattttacgg | agactatggt | ttcgaccgta | tcttaaaagt | agatgcacct | 240 |
| aaaacatttt | ctatgggagc | caagcctact | ggatccgctg | ctgcaaaacta | tactactgcc | 300 |
| gtagatagac | ctaaccgggc | ctacaataag | cattttacag | atgcagagtg | gttactaat | 360 |
| gcaggcttca | ttgccttaaa | catttgggat | cgctttgatg | ttttctgtac | tttaggagct | 420 |
| tctaattggtt | acattagagg | aaactctaca | gcgttcaatc | tcgttggttt | attcggagtt | 480 |
| aaaggtacta | ctgtaaatgc | aaatgaacta | ccaaacgttt | ctttaagtaa | cgagttggtt | 540 |
| gaactttaca | cagacacctc | tttctcttgg | agcgtaggcg | ctcgtggagc | cttatgggaa | 600 |
| tgcggttggtg | caactttggg | agctgaattc | caatatgcac | agtcacaaacc | taaagttgaa | 660 |
| gaacttaagt | tgatctgtaa | cgtatcgcaa | ttctctgtaa | acaaacccaa | gggctataaa | 720 |
| ggcgttgctt | tcccttggcc | aacagacgct | ggcgtagcaa | cagctactgg | aacaaagtct | 780 |
| gcgaccatca | attatcatga | atggcaagta | ggagcctctc | tatcttacag | actaaactct | 840 |
| ttagtgccat | acattggagt | acaatgggtct | cgagcaactt | ttgatgctga | taacatccgc | 900 |
| attgctcagc | caaaactacc | tacagctggt | ttaaacttaa | ctgcatggaa | cccttcttta | 960 |
| ctaggaaagt | ccacagcatt | gtctactact | gattcgttct | cagacttcat | gcaaattggt | 1020 |
| tctgtcaga | tcaacaagtt | taaatctaga | aaagcctgtg | gagttactgt | aggagctact | 1080 |
| ttagttgatg | ctgataaatg | gtcacttact | gcagaagctc | gtttaattaa | cgagagagct | 1140 |
| gctcacgtat | ctggtcagtt | cagattctaa | | | | 1170 |

Seq ID 3

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| atgtctgtta | atccatcagg | aaattccaag | aacgatctct | ggattacggg | agctcatgat | 60 |
| cagcatcccg | atgttaaaga | atccgggggt | acaagtgcta | acctaggaag | tcatagagtg | 120 |
| actgcctcag | gaggacgcca | agggttatta | gcacgaatca | aagaagcagt | aaccgggttt | 180 |

| | | | | | | |
|-------------|------------|-------------|------------|------------|-------------|-----|
| tttagtcgga | tgagcttctt | cagatcggga | gtcccaagag | gtagccaaca | accctctgct | 240 |
| ccatctgcag | atactgtacg | tagcccggtg | ccgggagggg | atgctcgcgc | taccgagggg | 300 |
| gctggtagga | acttaattaa | aaaagggtac | caaccagggg | tgaaagtcac | tatcccacag | 360 |
| gttcctggag | gaggggcccc | acgttcatca | ggtagcacga | cactaaagcc | tacgcgtccg | 420 |
| gcacccccac | ctcctaaaac | gggtggaact | aatgcaaac | gtccggcaac | gcacgggaag | 480 |
| gggtccagcac | cccagcctcc | taaaacaggt | gggaccaatg | ctaagcgcgc | agcaacgcac | 540 |
| gggaaagggtc | cagcacctca | acctcctaag | ggcattttga | aacagcctgg | gcagtcctggg | 600 |
| acttcaggaa | agaagcgtgt | cagctgggtct | gacgaagatt | aa | | 642 |

Seq ID 4

| | | | | | | |
|-------------|------------|-------------|------------|------------|------------|------|
| atgggaatca | atccttcggg | taatagatca | ccagatgatg | tatgggtagg | aggagctcaa | 60 |
| ggcgatagct | ccagtaccca | aggtacagga | gctacaaact | caaactcttg | tgctcacaac | 120 |
| gtaactacat | caacctcaca | gccgcaagtt | gcttctaag | caaagcagtt | atggcagacg | 180 |
| gtaaggaggt | tctttttagg | gaagaaatca | cccgattctt | ctcaggggtg | ttcgggacct | 240 |
| gcaatgcaaa | gtccttcagg | acctacaata | cggcctacgc | gtccggcacc | tccacctcct | 300 |
| acaacgggtg | gggctaattg | gaaacgtccc | gcaacgcacg | ggaaagggtc | agcacctcaa | 360 |
| cctcctacgg | cggggtcttc | ttcaggatca | gagcaacctc | ctgccatgag | ttctgaagtc | 420 |
| gctaaacttg | tgagtgaatt | aaaagatgca | gtccatagtc | atgcggagtc | tcaaaaagta | 480 |
| cttaaaaagg | tatctcaaga | gctacaaaaca | aagtggacgg | attgggaaaa | taataggggt | 540 |
| ccagactatc | ttttgcatgg | ttatcgtgtc | attgctcgag | ctttgcagca | aacatacaca | 600 |
| gaacaatcta | tgcttatcga | agggacttca | tctacaggac | cagttccgca | agcagtgcac | 660 |
| gtagctaagg | atgctgtaac | tcagacagtt | agaggcgcaa | ttaagaatct | agaaaaacct | 720 |
| aagccaggta | atgatcctga | tggtgtactc | atgcaagtgg | ttataagctt | aggtatcgaa | 780 |
| ggacctacat | tagaccacag | agaatctatc | caaaaacttt | tagaaactag | ggtttcggat | 840 |
| ttcggtaggag | atgatagcga | catagattat | acaagtgata | tagctcgatt | agggtcagct | 900 |
| ttagatcggg | tacgcgaaaa | tcctccta | gagatgccta | gaatatggat | agcattagca | 960 |
| cgagaactcg | gtgcggctgt | acactctcat | gctacttccg | tccgaatcgc | aaatgcagga | 1020 |
| aagaatcaca | ctcgtgacgt | tgtgcgaatg | gccaatgagt | cgagtagact | acttcaaggt | 1080 |
| atgaaagtgt | tatcggtcgg | agcttgggcg | aatacaatga | cagttttaat | cggggatctt | 1140 |
| tttgaataa | | | | | | 1149 |

Seq ID 5

| | | | | | | |
|-------------|------------|-------------|------------|------------|-------------|------|
| atgaaaacgt | tgtggcactt | cgtatccaaa | gcctttttat | cgatagtagg | actgtgttgc | 60 |
| ggagttgttc | ttgcttttgt | cgttatattc | gcactcatag | cttctctctt | aggaaatggg | 120 |
| gtagctacat | togttagctt | gccctgacgc | caaggagaag | taaaagatct | agggaaaaca | 180 |
| gccccattta | ttgctgttat | cgaaatgaaa | gatgtaattg | cttcttcaaa | aaatcaggcc | 240 |
| aaaacgattc | agaatatctt | agaaggattt | gagaaagctc | ctcttaaaga | togtgcataa | 300 |
| ggatattgtca | ttgatatgga | ttgcccagga | ggcgaggtct | ttgaaataga | tagaatttac | 360 |
| tctatgcttc | gcttttgtaa | agaacgtga | ggattcccta | tttatattta | tgtgaatggg | 420 |
| ctttgtgctt | cgggaggtca | ttatgtatcc | tgcgtgcgaa | ctaaaattta | tgccacctcc | 480 |
| tcctctctta | tgggttctat | cggagtgcgt | tctggaccat | tcttcaatgt | aaaagaagggt | 540 |
| ttaaatcgct | acggagttga | aagtgtatctg | ctgacagctg | gaaaagataa | ggctccaatg | 600 |
| aatccttata | caccgtggac | ttctcatgat | agagaagaac | ggcaagcgac | tcttgatttt | 660 |
| ctctacggac | aatttggtga | tatagttaca | caaaaccgtc | ctctgcttac | taaagagaag | 720 |
| ttagttcaca | ctctcggagc | acgtattttt | tctccagaga | aggccaaaca | agaaggctat | 780 |
| attgatgttg | taggcgcaac | taaaagaaca | gtccttcaag | acatagttgc | tgtttgtaag | 840 |
| attgaagata | actatagagt | gattggctct | gttggtgatg | gttggtggaa | gcgggtggct | 900 |
| tcagctgcag | cttcaagtc | attagttact | ggcatgatta | aacacgatat | tctgccttta | 960 |
| tcccatgacg | ctgcatacat | acctccctac | ttggcactgt | ag | | 1002 |

Seq ID 6

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|------------|-----|
| atgagacctc | atcgtaaaaca | cgtatcatct | aaaagccttag | ctttaaagca | atctgcatca | 60 |
| actcatgtag | agatcacaca | aaaagccttt | cgtctctcta | tgctctataa | acagctgac | 120 |
| ctagagaaaa | gcgaccacct | ccccctatg | gaaacaatcc | gtgtgggtgt | aacctctcat | 180 |
| aaagataagc | taggcaccga | gggtcatggt | gtagcttctc | atggcaaaaga | aatccttcaa | 240 |
| actaagggtc | ataacgcaaa | cccatacact | gcagtgatca | atgcttttaa | gaaaatccgc | 300 |
| accatggcaa | ataagcactc | caataaacgt | aaagacagga | caaaacatga | tctaggtctt | 360 |
| gcagcaaaaag | aagaacgtat | cgcaatacag | gaagaacaag | aagatcgctt | tagcaacgag | 420 |
| tggtcttctg | tcaaggcctt | cgatgcctgg | gattctctaa | aaactcttgg | gtatgttccc | 480 |
| gcatcagcga | aaaagaagat | ctccaagaaa | aagatgagca | ttcgtatgct | atctcaagac | 540 |
| gaggctatcc | gcagctaga | gtctgcgcga | gaaaacttcc | tgatcttctt | gaacgagcaa | 600 |
| gagcataaaa | tccaatgcat | ttataaaaaa | catgacggca | actatgtcct | tattgaacct | 660 |
| tccctcaagc | caggattctg | catctga | | | | 687 |

Seq ID 7

| | | | | | | |
|-------------|------------|-------------|-------------|------------|------------|------|
| atggcagctc | ctatcaacca | accatcgaca | acgactcaga | taactcaaac | tgggcagact | 60 |
| acaacgacaa | caacggtagg | atcatttagga | gagcattctg | ttacaacaac | aggatctggg | 120 |
| gcagcagcac | aaacatctca | gacagtaact | ctaattgcag | atcacgaaat | gcaagaaatt | 180 |
| gcaagtcaag | atggatccgc | ggtaagcttt | tctgctgagc | actctttttc | taccctccct | 240 |
| ccagagactg | gaagtgttg | agctacagca | caatccgctc | aatctgcggg | gctattttca | 300 |
| ttatcaggtc | gtacacaaag | aagagattcg | gagatttctt | cctcttctga | cggcagttcg | 360 |
| atatctagaa | ctagctcaaa | cgcatcttct | ggagaaacaa | gcagagctga | aagtagtcct | 420 |
| gatctaggcg | acttggtatg | cttatcagga | agcgagcgcg | ctgaaggagc | cgaaggacct | 480 |
| gaaggacctg | gaggcttacc | tgaaagtacg | attccacatt | atgatcctac | cgataaagcg | 540 |
| tctattttga | acttcttgaa | aaatcctgca | gttcagcaga | aaatgcagac | caaaggaggc | 600 |
| cactttgttt | atgtagatga | agccagaagt | agtttcattt | ttgtccgcaa | tgggtgactg | 660 |
| tcaactgctg | agtctataaa | agtttcta | gcaaaaacca | aagaaaatat | tactaagcct | 720 |
| gcggaacttag | aaatgtgcat | cgctaaatc | tgtgtgggat | atgaaacat | ccactcggat | 780 |
| tggacgggac | gcgtaaaacc | tacaatggaa | gagcgctcgg | gagccacagg | aaattacaat | 840 |
| catctgatgc | tcagcatgaa | atttaaaact | gctgtagtct | acggctcctg | gaatgctaaa | 900 |
| gaatctagta | gtggatatac | accctctgca | tggcgctcgt | gagcaaaagt | agaaacaggt | 960 |
| ccgatttggg | atgatgttgg | gggcttgaaa | ggcattaact | ggaaaacgac | cccagctcca | 1020 |
| gacttctcct | ttataaatga | aactccaggt | ggaggggctc | actcgacgct | tcatacaggt | 1080 |
| cctggcactc | cagtaggagc | tactgtgggt | cctaattgtga | atgtcaactt | gggaggcatt | 1140 |
| aaggttgatc | tgggtggcat | caatttaggt | ggaattacaa | cgaatgtcac | tacagaagaa | 1200 |
| ggtggtggaa | ccaacataac | atctacgaaa | tccacatcta | ctgatgataa | agtctcaata | 1260 |
| acatctacag | gatctcaaag | tacgatcgaa | gaagacacta | tacaatttga | cgatcctggt | 1320 |
| cagggagagg | atgataacgc | aattcccggc | acaaacacac | ctcctcctcc | aggctcctcg | 1380 |
| ccaaatctaa | gcagttctcg | cttgctgact | atttccgaatg | cgtccttgaa | ccaagtctta | 1440 |
| cagaatgtcc | gacaacatct | gaatacggct | tatgattcga | atggtaattc | agtctcagat | 1500 |
| ctcaatcagg | atttaggcca | ggtagtaaaa | aacagtga | acggagtga | cttccctact | 1560 |
| gtgattcttc | ctaaaactac | tggcgataca | gatccatccg | gtcaagcaac | cggaggagtc | 1620 |
| actgaaggcg | gcggtcatat | ccgtaattatt | atccaaagga | atacacaatc | tacggggcaa | 1680 |
| agtgaaggag | caacacctac | acctcaacct | actatagcaa | agatagtgc | ttccctgaga | 1740 |
| aaagcaaatg | taagttccag | ctctgtgcta | ccacaaccac | aagtagctac | gacgatcacc | 1800 |
| cctcaagcga | gaacggccag | tacatctaca | acgagcatag | gaaccgggac | agaaagcaca | 1860 |
| tctacaacaa | gtacgggga | gggaacagga | agtgtctcca | cacaaagtac | tggcgtaggg | 1920 |
| acaccaacta | cgacgactcg | atctacagga | acttcggcga | caaccacaac | atcatcagct | 1980 |
| tcgacacaaa | caccccaagc | gcctcttccc | tctgggacca | ggcatgttgc | tacaatctcc | 2040 |
| ttagtgcgta | atgctgcagg | aaggtctatt | gtattacaac | aagggggctg | atctcaaagc | 2100 |
| ttcccgatcc | ctccctcagg | gactggaaca | cagaatatgg | gggcaaat | gtgggctgga | 2160 |
| gcaagtcaag | ttgcttcac | tttaggccag | gtcgtgaatc | aagcagctac | agcaggttct | 2220 |
| caaccctcct | ctcgtagatc | ttccccaaca | agtccacgaa | gaaaatag | | 2268 |

Seq ID 8

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|-------------|------|
| atgaaaacgt | ctcaactctt | ttataagact | tcaaaaaatg | caaataaaag | cgctgctgtg | 60 |
| ctctcaaacg | acctcctaga | aaaggcagga | tacctattta | aagtaagtaa | aggagtctat | 120 |
| acctatacac | gcctgttatg | gcgcgtggtc | tccaagatga | tgaacatcat | tagagaggaa | 180 |
| cttaatgcga | ttggagggtca | agaacttcta | ctcccacttc | tccacaatgc | tgaactttgg | 240 |
| caacatacag | ggagatggga | ggcatttact | tccgaaggac | tgctctacac | tctcaaagac | 300 |
| cgcgaaggaa | aatctcattg | cctagctcct | acacatgaag | aggctcatctg | ctcttttgtt | 360 |
| gcacaatggc | tctcctcaaa | aagacaactt | cctctccacc | tttaccaaat | tgctacaaaa | 420 |
| ttccgagacg | agattcgccc | tcgattcggg | ctcattcgct | ctcgagagct | ccttatggaa | 480 |
| gacagctata | ccttctcaga | ctctcccgaa | caaatagaac | agcaatatga | aaaactccgc | 540 |
| tctgcgtata | gtaagatctt | tgatcgtctc | ggctctgctt | atgtcatcgt | tacagctgat | 600 |
| ggaggggaaa | tccggcaagg | aaagtctgag | gaatttcagg | tcctttgctc | tctaggcgag | 660 |
| gacacgatct | gcgtcagcgg | ttcctatgga | gctaattattg | aggctgctgt | ctccattcct | 720 |
| ccacagcatg | cctacgatcg | cgagtttctt | cccgctgaag | aagtgccac | ccctgggatt | 780 |
| acaacaatag | aagctctagc | aaacttcttc | tctatccctt | tacataaaat | tttaaaaaacc | 840 |
| cttgcgttaa | aactctccta | ctcaaatgaa | gaaaaattca | ttgccattgg | aatgagagga | 900 |
| gatcggcaag | tcaacctagt | gaaggctcgt | tccaaactga | atgccgatga | tattgctcta | 960 |
| gcttctgatg | aagaaatcga | acgcgttcta | ggcacagaaa | aaggattcat | cggctcccta | 1020 |
| aactgtccca | tagacttttt | cgcagacgaa | acaacgtccc | caatgacgaa | ctttgtttgt | 1080 |
| gcggggcaatg | ctaaagataa | gcactacgta | aatgtaaact | gggatcgcga | cctcctcccc | 1140 |
| cccacaatag | gtgactttct | actcgtgtaa | gagggagaca | catgtcctga | aaatcctggc | 1200 |
| catccttacc | gcatttatca | aggcatagaa | gttgctcata | ttttcaatct | cgggacacgc | 1260 |
| tataccgata | gttttgaggt | aaacttccaa | gatgaacacg | ggcaaaccca | gcagtgtctg | 1320 |
| atggggacct | acggcattgg | agtcggaaga | acattagccg | cttggtgtaga | acagcttgcc | 1380 |

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|------|
| gacgaccgtg | gtattgtttg | gccaaaagca | ctcgctccct | tctctatcac | tatcgccctt | 1440 |
| aacggaggag | acactgtatc | tcaagagcct | gcggaaacta | tttatcatga | gctacaaagt | 1500 |
| caaggctatg | agccccctct | tgatgatcga | gatgaaagac | tcggatttaa | acttaaagac | 1560 |
| agtgcacctt | tcggcattcc | ttataagcct | atttttaggaa | agtcctacca | atcttcggga | 1620 |
| atattcgaaa | ttgaatcccg | atctggagaa | aagtatacag | tctccccgga | ggccttccct | 1680 |
| acttggtgtc | agaatcactt | agcctag | | | | 1707 |

Seq ID 9

| | | | | | | |
|-------------|------------|-------------|------------|-------------|-------------|------|
| atggcatcag | gaatcggagg | atctagtggg | ttaggaaaga | ttccacctaa | agataatggg | 60 |
| gatagaagtc | gatcgccctc | tcctaaggga | gaacttggca | gccacgagat | ttccctgcct | 120 |
| cctcaagaac | atggagagga | aggagcttca | ggatcttcgc | atatacatag | cagttcctct | 180 |
| tttctaccag | aagatcagga | gtctcagagc | tcttcttcgg | cagcttctag | cccggttctt | 240 |
| ttttctcgcg | tacgttcttg | ggtagacagg | gccttaaaat | catttggcaa | ctttttttcc | 300 |
| gcagagtcta | cgagtcaagc | gcgtgaaacg | cgacaagcct | ttgttagatt | atcaaaaacc | 360 |
| atcacgcggg | atgagagacg | ggatgtcgat | tcatacaagt | ctgctgctac | agaagcccgga | 420 |
| gtggcagagg | acgcgagtg | ttcaggcgaa | aatccttctc | agggggttcc | agaaacctct | 480 |
| tctggaccag | aacctcagcg | tttattttct | cttcttcag | taaaaaaca | gagcggtttg | 540 |
| ggtcgggttg | tacagacagt | tcgcgatcgc | atagtacttc | ctagtggggc | tccacctaca | 600 |
| gacagcgagc | ctttaagtct | ctacgagcta | aacctccgtt | tgagttagtt | acgtcaggag | 660 |
| ctctctgaca | tacaaagtaa | tgatcagttg | actccagagg | aaaaagcaga | agccacagtt | 720 |
| accatacaac | agctgatcca | aattacagaa | ttccaatgcg | gctatatgga | ggcaacacaa | 780 |
| tcttcggtat | ctctagcaga | agctcgtttt | aagggggtag | aaactagtga | tgagatcaat | 840 |
| tcctctgtgt | cagaactgac | agatcctgag | cttcaagaac | tcatagagtga | tgagactct | 900 |
| cttcaaaacc | tattagatga | gactgccgac | gatttagaag | ctgctttgtc | ccatgctcga | 960 |
| ttgagttttt | ctttagacga | taatccaact | ccgatagaca | ataatccaac | totgatttct | 1020 |
| caagaagagc | ctatttatga | ggaaatcgga | ggagctgcag | atcctcaaa | aactcgggaa | 1080 |
| aactgggtcta | caagattatg | gaatcagatt | cgcgaggctc | tggtttctct | tttaggaatg | 1140 |
| attttaagca | ttctagggtc | catcttgcac | aggttgcgta | ttgctcgtca | tcagctgct | 1200 |
| gaagcagtg | gtcgttgttg | cacgtgccga | ggagaagagt | gtacttcttc | tgaagaggac | 1260 |
| tcgatgtcgg | tggggtctcc | ttcagaaatt | gatgaaactg | aaagaacggg | ctctccgcat | 1320 |
| gacgttccac | gcagaaatgg | aagtccacgt | gaagattctc | cattgatgaa | tgcttagta | 1380 |
| ggatgggcac | ataagcacgg | tgctaaaacc | aaggagagtt | cagaatcaag | taccccgga | 1440 |
| atltcgattt | ctgctcccat | agtgcagagt | tggagtcagg | acagttccgt | cagttttatt | 1500 |
| gttatgggaag | atgacatcat | tttctatgat | gttccctcgt | gaaaagatgg | aatctatgac | 1560 |
| gttcctagtt | cccctagatg | gagtcctgcg | cgagagttgg | aagaggatgt | ttttggagat | 1620 |
| tatgaagtcc | ctataacctc | tgctgaacca | tctaaagaca | agaacatcta | catgacacct | 1680 |
| agattagcaa | ctcctgctat | ctatgatctt | ccttcacgtc | caggatcgtc | tggagctca | 1740 |
| cgttctccgt | cttcagatcg | cgtacgaagc | agctcaccac | atagacgggg | tgtgctctct | 1800 |
| ccctcagttc | cttcacctgc | tatgagtgcg | gaggggagca | tttatgagga | tatgagcggg | 1860 |
| gcttcagggtg | caggtgaaag | tgattatgaa | gatattgagc | gttccccctc | tcttagaggc | 1920 |
| gacttggatg | aacctatata | tgctaatact | cctgaagata | atccatttac | tcagagaaat | 1980 |
| atagatagaa | ttttacagga | gaggtcaggc | ggtgcttccg | cttctcctgt | agagcctatt | 2040 |
| tatgatgaga | tcccatggat | tcattggcagg | ccccctgcta | cacttccaag | acccgagaat | 2100 |
| acattgacta | atgtttcgc | ttagagtgcg | ccagggtttg | gaccagaagt | aagagccgct | 2160 |
| ttgcttagcg | agagcgtgag | tgctgttatg | gtcgaagcag | agagtattgt | tctccaaca | 2220 |
| gagccggggg | acggagaatc | agaatatcta | gagcccttag | ggggacttgt | agctacaacg | 2280 |
| aaaatcttac | tacaaaaagg | atggcctcgt | ggagagtcga | atgcttag | | 2328 |

Seq ID 10

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| atgcgctttt | tttgcctcgg | aatgttgctt | ccttttactt | ttgtattggc | taatgaaggt | 60 |
| ctccaacttc | ctttggagac | ctataattaca | ttaagtcctg | aatatcaagc | agccctcaa | 120 |
| gtagggttta | ctcataacca | aaatcaagat | ctcgcaattg | tcgggaatca | caatgatttc | 180 |
| atcttggaat | ataagtaact | tcggtcgaat | ggaggtgctc | ttacctgtaa | gaatctctcg | 240 |
| atctctgaaa | atatagggaa | tgctctcttt | gagaagaatg | tctgtcccaa | ttctggcggg | 300 |
| gcaatttatg | ctgctcaaaa | ttgcacgatc | tccaagaatc | agaactatgc | atttactaca | 360 |
| aacttgggtc | ctgacaatcc | tacagccact | gcgggatcac | tattgggtgg | agctctcttt | 420 |
| gccataaatt | gctctattac | taataacctc | ggacagggaa | ctttcgttga | caatctcgct | 480 |
| ttaaataagg | gggggtgcct | ctatactgag | acgaacttat | ctattaaaga | caataaaggc | 540 |
| ccgatcataa | tcaagcagaa | tcgggcacta | aattcggaca | gtttaggagg | agggatttat | 600 |
| agtgggaact | ctctaaatat | agagggaaat | tctggagcta | tacagatcac | aagcaactct | 660 |
| tcaggatctg | ggggaggcat | attttctacc | caaactctca | cgatctctct | gaataaaaaa | 720 |
| ctcatagaaa | tcagtgaaaa | ttccgcgttc | gcaataaact | atggatcgaa | cttcaatcca | 780 |
| ggaggaggag | gtcttactac | caccttttgc | acgatattga | acaaccgaga | aggggtactc | 840 |
| tttaacaata | accaaagcca | gagcaacggg | ggagccattc | atgcgaaatc | tatcattatc | 900 |

| | | | | | | |
|--------------|-------------|-------------|-------------|-------------|------------|------|
| aaagaaaatg | gtcctgtata | ctttttaaat | aacactgcaa | ctcggggagg | ggctctcctc | 960 |
| aacttatcag | cagggttctgg | aaacggaagc | ttcatcttat | ctgcagataa | tggagatatt | 1020 |
| atctttaaca | ataatacggc | ctccaagcat | gccttcaatc | ctccatacag | aaacgccatt | 1080 |
| cactcgactc | ctaatatgaa | tctgcaaata | ggagcccgtc | ccggctatcg | agtgtgtgtc | 1140 |
| tatgatccca | tagaacatga | gtccctctoc | tccttcccca | tactctttaa | tttcgaaacc | 1200 |
| ggtcatacag | gtacagtttt | atcttcaggg | gaacatgtac | accagaactt | taccgatgaa | 1260 |
| atgaatttct | tttcttattt | aaggaaactc | tcggaactac | gtcaaggagt | ccttgctgtt | 1320 |
| gaagatgggtg | cggggctggc | ctgctataag | ttcttccaac | gaggaggcac | tctacttcta | 1380 |
| ggctcaagggtg | cggtgatcac | gacagcagga | acgattccca | caccatcctc | aacaccaacg | 1440 |
| acagtaggaa | gtactataac | tttaaatac | attgccattg | accttccttc | tattctttct | 1500 |
| tttcaagctc | aggtcccaaa | aatttggatt | tacccacaaa | aaacaggatc | tacctatact | 1560 |
| gaagattcca | acccgacaat | cacaatctca | ggaactctca | ccttacgcaa | cagcaacaac | 1620 |
| gaagatccct | acgatagtct | ggatctctcg | cactctcttg | agaaagtccc | ccttctttat | 1680 |
| attgtcgatg | tcgctgcaca | aaaaattaac | tcctcgcaac | tggatctatc | cacattaaat | 1740 |
| tctggcgaa | actatgggta | tcaaggcatc | tggtcgacct | attgggtaga | aactacaaca | 1800 |
| atcacgaacc | ctacatctct | actaggcgcg | aatacaaaaac | acaagctgct | ctatgcaaac | 1860 |
| tggtctcctc | taggtacccg | tcctcatccc | gaacgtcgag | gagaattcat | tacgaatgcc | 1920 |
| ttgtggcaat | cggcatatac | ggctcttgca | ggactccact | ccctctcctc | ctgggatgaa | 1980 |
| gagaagggtc | atgcagcttc | cctacaaggc | attggctctc | tgggttcatca | aaaagacaaa | 2040 |
| aacggtttta | agggatttcg | tagtcatatg | acaggttata | gtgctaccac | cgaagcaacc | 2100 |
| tcttctcaaa | gtccgaattt | ctctttagga | tttgcctagt | tcttctccaa | agctaaagaa | 2160 |
| catgaatctc | aaaatagcac | gtcctctcac | cactatttct | ctggaatgtg | catagaaaat | 2220 |
| actctcttca | aagagtggat | acgtctatct | gtgtctcttg | cttatatgtt | tacctcgga | 2280 |
| catacccata | caatgtatca | gggtctcctg | gaagggaact | ctcagggatc | ttccacaac | 2340 |
| cataccttag | caggggctct | ctcctgtgtt | ttcttaacct | aacctcacgg | cgagtccctg | 2400 |
| cagatctatc | cctttattac | tgcccttagcc | atccgaggaa | atcttgctgc | gtttcaagaa | 2460 |
| tctggagacc | atgctcggga | attttcccta | caccgcccc | taacggacgt | ctccctccct | 2520 |
| gtaggatcc | gcgcttcttg | gaagaaccac | caccgagttc | ccctagtctg | gctcacagaa | 2580 |
| atttctctatc | gctctactct | ctataggcaa | gatcctgaac | tccactcgaa | attactgatt | 2640 |
| agccaaaggta | cgtggagcag | gcaggccact | cctgtgacct | acaatgcttt | agggatcaaa | 2700 |
| gtgaaaaata | ccatgcaggt | gtttcctaaa | gtcactctct | ccttagatta | ctctgcggt | 2760 |
| atttcttctc | ccacgctgag | tcactactta | aacgtggcga | gtagaatgag | atttttaa | 2817 |

Seq ID 11

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|------------|------|
| atgaaatcct | ctcttcattg | gtttttaatc | tcgtcatctt | tagcacttcc | cttgtcacta | 60 |
| aatttctctg | cgtttgctgc | tggtgttgaa | atcaatctag | gacctacca | tagcttctct | 120 |
| ggaccaggaa | cctacactcc | tccagcccaa | acaacaaatg | cagatggaac | tatctataat | 180 |
| ctaaccagggg | atgtctcaat | caccaatgca | ggatctccga | cagctctaac | cgcttctctg | 240 |
| tttaaagaaa | ctactgggaa | tctttcttcc | caaggccacg | gctaccaatt | tctctacaa | 300 |
| aatatcgatg | cgggagcgaa | ctgtaccttt | accaatacag | ctgcaaataa | gcttctctcc | 360 |
| ttttcaggat | tctcctatct | gtcactaata | caaaccacga | atgctaccac | aggaacagga | 420 |
| gccatcaagt | ccacaggagc | ttgttctatt | cagtgcgaact | atagttgcta | ctttggccaa | 480 |
| aacttttcta | atgacaatgg | aggcgccctc | caaggcagct | ctatcagctc | atcgctaaac | 540 |
| cccaacctaa | cgttttgccaa | aaacaaaagc | acgcaaaaag | gggggtgccct | ctattccacg | 600 |
| ggagggatta | caattaacaa | tacgttaaac | tcagcatcat | tttctgaaaa | taccgaggcg | 660 |
| aacaatggcg | gagccattta | cacggaagct | agcagtttta | ttagcagcaa | caaagcaatt | 720 |
| agctttataa | acaatagtgt | gaccgcaacc | tcagctacag | ggggagccat | ttactgtagt | 780 |
| agtacatcag | cccccaaacc | agtcttaact | ctatcagaca | acgggggaact | gaactttata | 840 |
| ggaaatacag | caattactag | tggtggggcg | atttatactg | acaatctagt | tctttcttct | 900 |
| ggaggaccta | cgcttttttaa | aaacaactct | gctatagata | ctgcagctcc | cttaggagga | 960 |
| gcaattgcca | ttgctgactc | tggtatcttg | agtctttcgg | ctcttggtgg | agacatcact | 1020 |
| tttgaaggaa | acacagtagt | caaaggagct | tcttcgagtc | agaccactac | cagaaattct | 1080 |
| attaacatcg | gaaacaccaa | tgctaagatt | gtacagctgc | gagcctctca | aggcaatact | 1140 |
| atctacttct | atgatcctat | aacaactagc | atcactgcag | ctctctcaga | tgctctaaac | 1200 |
| ttaaatggtc | ctgtaccttg | agggatcctt | gcataatca | gaaccatcgt | atttcttgga | 1260 |
| gagaagctct | cgggaagcaga | agctgcagaa | gctgataatc | tcaaatctac | aattcagcaa | 1320 |
| cctctaactc | ttgcggggagg | gcaactctct | cttaaatcag | gagtcactct | agttgccaa | 1380 |
| tccttttctg | aatctccggg | ctctaccctc | ctcatggatg | cagggaccac | attagaaacc | 1440 |
| gctgatggga | tcactatcaa | taatcttggt | ctcaatgtag | attccttaaa | agagaccaag | 1500 |
| aaggctacgc | taaaagcaac | acaagcaagt | cagacagtc | ctttatctgg | atcgctctct | 1560 |
| cttgtagatc | cttcttgaaa | tgtctacgaa | gatgtctctt | ggaataaccc | tcaagtcttt | 1620 |
| tcttgtctca | ctcttactgc | tgacgacccc | gcgaatattc | acatcacaga | cttagctgct | 1680 |
| gatcccctag | aaaaaaatcc | tatccattgg | ggataccaag | ggaattgggc | attatcttgg | 1740 |
| caagaggata | ctgcgactaa | atccaaagca | gcgactctta | cctggacaaa | aacaggatac | 1800 |

| | | | | | | |
|-------------|------------|------------|------------|------------|-------------|------|
| aatccgaatc | ctgagcgctg | tggaacctta | gttgctaaca | cactatgggg | atcctttgtt | 1860 |
| gatgtgcgct | ccatacaaca | gcttgtagcc | actaaagtac | gccaatctca | agaaactcgc | 1920 |
| ggcatctggt | gtgaagggat | ctcgaacttc | ttccataaag | atagcacgaa | gataaataaa | 1980 |
| ggttttcgcc | acataagtgc | aggttatgtt | gtaggagcga | ctacaacatt | agctttctgat | 2040 |
| aatcttatca | ctgcagcctt | ctgccaatca | ttcgggaaag | atagagatca | ctttataaat | 2100 |
| aaaaatagag | cttctgccta | tgcagcttct | ctccatctcc | agcatctagc | gaccttgtct | 2160 |
| tctccaagct | tgttacgcta | ccttcctgga | tctgaaagtg | agcagcctgt | cctctttgat | 2220 |
| gctcagatca | gctatatcta | tagtaaaaat | actatgaaaa | cctattacac | ccaagcacca | 2280 |
| aaggagagag | gctcgtggta | taatgacggt | tgcgctctgg | aacttgcgag | ctccctacca | 2340 |
| cacactgctt | taagccatga | gggtctcttc | cacgcgtatt | ttcctttcat | caaagtagaa | 2400 |
| gcttcgtaca | tacaccaaga | tagcttcaaa | gaacgtaata | ctaccttggg | acgatctttc | 2460 |
| gatagcggtg | atttaattaa | cgtctctgtg | cctattggaa | ttaccttcga | gagattctcg | 2520 |
| agaaacgagc | gtgcgtctta | cgaagctact | gtcatctacg | ttgccgatgt | ctatcgtaag | 2580 |
| aatcctgact | gcacgacagc | tctcctaate | aacaatacct | cgtggaaaac | tacaggaacg | 2640 |
| aatctctcaa | gacaagctgg | tatcggaaga | gcagggatct | tttatgcctt | ctctccaaat | 2700 |
| cttgaggatca | caagtaacct | atctatggaa | attcgtggat | cttcacgcag | ctacaatgca | 2760 |
| gatcttggag | gtaagttcca | gttctaaa | | | | 2787 |

Seq ID 12

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atgtttgaga | agttcactaa | tagagcaaaa | caagtcatta | aactggcgaa | aaaggaggct | 60 |
| cagcgtttaa | atcataacta | cctgggtact | gagcacatcc | tgccttggct | tctcaaaactt | 120 |
| ggccaaggga | tagctgttaa | tgtattacgc | aacctcggtg | tagattttga | tacggcacgg | 180 |
| caagaggtgg | aacgcctgat | tggttatggt | ccagaaattc | aagtctacgg | agacctgccc | 240 |
| cttacaggaa | gagtaaaaaa | atcttttgaa | tcagcaaatg | aagaggccag | ccttttagag | 300 |
| cacaattatg | tccgggacgga | gcattttactc | ttagggatcc | tacatcaatc | agatagtgtc | 360 |
| gctcttcagg | tattagaaaa | cttacataatc | gatccaagag | aggttcgtaa | ggaaattcctt | 420 |
| aaagaattag | agaccttcaa | tctacaactt | cctccttcgt | cgctcgtctc | ttcctcatcc | 480 |
| tctcgaagca | acccttcctc | ttcaaaatct | ccttttaggtc | atagcttagg | ttctgacaaa | 540 |
| aacgaaaagc | tttctgctct | gaaagcatat | ggttatgatt | taacggagat | ggctccgagag | 600 |
| tctaagctcg | atcctgtcat | tggctcgttc | tcagaagtcg | aacggttgat | tttgattcctt | 660 |
| tgccgaagaa | gaaaaaacaa | tcctgtactt | attggagaag | ctggagttag | taagactgca | 720 |
| attgttgagg | gtctggctca | aaaaatcatt | ctgaatgagg | ttcctgatgc | cttacggaaa | 780 |
| aagcgactga | ttactctaga | tctagcatta | atgattgctg | gaacaaaata | tcgagggcaa | 840 |
| tttgaggaac | ggatcaaagc | tgtcatggat | gaagttcgca | agcatggaaa | catcttgctc | 900 |
| ttcattgacg | agctccacac | gattgttaga | gcaggagcag | ctgaaggtgc | tatcgatgct | 960 |
| tcaaacattt | taaaacctgc | gttagcgcga | ggtaaaattc | agtgtattgg | agcaactacg | 1020 |
| atagatgagt | atcgcaagca | catagaaaaa | gacgcagctt | tagaacgtcg | tttccaaaaa | 1080 |
| atcgtgggtc | accctcctag | tgtagatgag | actattgaga | ttttaoctgg | cctcaagaaa | 1140 |
| aagtatgaag | aactctcaca | tgtcttcatt | actgaagaag | ctttaaaagc | agctgcgact | 1200 |
| ctttctgatc | aatatgttca | tggacgtttc | ctccctgata | aagcaataga | tcttttagat | 1260 |
| gaagctgggg | ctcgtgtccg | tgtgaataca | atgggtcagc | ctacagattt | aatgaagcta | 1320 |
| gaggctgaaa | tcgaaaatac | aaaattggcc | aaagagcagg | ccattggaac | tcaagaatac | 1380 |
| gaaaaagctg | caggtttacg | tgtatgaagag | aaaaaacttc | gcgaacgtct | gcaaagtatg | 1440 |
| aaacaggaa | gggaaaatca | taaagaagag | caccaagttc | ctgtagatga | agaagcagtc | 1500 |
| gctcaggtag | tttctctaca | aacagggaatt | ccctcagcaa | ggctcacaga | agctgaaaagt | 1560 |
| gagaagcttc | tgaagttaga | agacacgtta | agaagaaaag | tcatttggtca | aaatgatgcc | 1620 |
| gttaccagca | tttgcctgtc | catccgacgt | tctcgaacag | ggatcaaaga | tcctaaccga | 1680 |
| cctacgggct | ccttcctatt | ccttgggcct | accggtgtag | ggaaaagcct | gctcgcccaa | 1740 |
| caaattgcta | tagagatgtt | cggtgggtgaa | gacgctctga | ttcaggtaga | catgtcagag | 1800 |
| tacatggaga | aatttgcctg | taccaagatg | atgggatcac | ctccaggata | tgtaggctcat | 1860 |
| gaagaagggg | gccaccttac | ggaacaggta | cgtcgccgtc | cttactgcgt | tgttctcttt | 1920 |
| gatgagatag | aaaaggcaca | cccagacatt | atggacctga | tgttgcaaat | tttagagcaa | 1980 |
| ggacgtctta | ctgattcttt | tggctcgcaa | gtggatttcc | gtcatgccat | tattatcatg | 2040 |
| acctccaatt | tgggagctga | tctcattcgt | aaaagcggag | aaattgggtt | tggcttgaag | 2100 |
| tcccatatgg | actataaggt | catccaagag | aaaatcgaac | atgctatgaa | gaaacactta | 2160 |
| aagcctgagt | tcattaacccg | tttggatgaa | agtgtgattt | tccgtcccct | cgagaaagaa | 2220 |
| tctctatcgg | agatcatcca | tttagagatc | aacaaactgg | actcgagact | gaaaaactac | 2280 |
| caaattggctt | tgaacatccc | agactctgtg | atttccttcc | tagtaacgaa | ggggcattct | 2340 |
| ccagaaatgg | gagcacgtcc | tctacgccgt | gtcattgagc | agtaccttga | agatcctcta | 2400 |
| goggagctct | tgcctaaaga | gtcctgccgt | caagaagctc | gcaagctacg | agcaaccttg | 2460 |
| gttgaaaaatc | gcgttgccct | tgaaggaggaa | gaagaggagc | aggaagctgc | tctccctagc | 2520 |
| cctcacttgg | aatcatag | | | | | 2538 |

Seq ID 13

| | | | | | | |
|-------------|-------------|-------------|------------|------------|------------|------|
| atggggctgc | aatccagggt | acaacattgt | atagaagtgt | cccagaattc | gaactttgat | 60 |
| tcacaagtaa | aacagtttat | ctatgcgtgc | caagataaga | cattaaggca | gtctgtactc | 120 |
| aagattttcc | gtaccatcc | tttactaaaa | attcatgata | ttgctcgggc | egtctatctt | 180 |
| ttgatggcct | tagaagaagg | cgaggattta | ggcttaagct | ttttaaatgt | acagcagtac | 240 |
| ccttcagggtg | ctgtagaact | gttttcttgt | gggggatttc | cttggaagg | attaccttat | 300 |
| cctgcagaac | atgcggaatt | tggcctactc | ctgttacaga | tgcagaggtt | ttatgaagag | 360 |
| agtcaggcat | acgtctctaa | aatgagtcac | tttcaacagg | cactctttga | tcaccaaggg | 420 |
| agcgtctttc | cctctctctg | gagccaggag | aactctcgac | tcctaaaaga | aaagacaact | 480 |
| cttagccaat | egtttctctt | ccaattagga | atgcaaattc | acccagaata | cagtcttgag | 540 |
| gatcctgcac | tagggttctg | gatgcaaaga | acgcgttctt | catccgcttt | tgtagccgct | 600 |
| tcaggatgtc | aaagtagcct | gggagcgtat | tcctcagggg | atgtcgggtg | tatcgcttat | 660 |
| ggaccttgct | ctggagacat | tagtgattgt | tattattttg | gatgttgtgg | aatcgctaaa | 720 |
| gagttcgtgt | gccaaaaatc | tcaccaaaact | acagagattt | cttttctcac | ctctacagga | 780 |
| aagcctcatc | ccagaaatac | gggattttcc | taccttcgag | attcctatgt | acatctgccg | 840 |
| atccgctgta | agatcactat | ttccgacaag | caatatcgcg | tgcacgctgc | gttggctgag | 900 |
| gccacctctg | catgacgtt | ttctattttc | tgtaaaggga | agaattgtca | ggttgttgac | 960 |
| ggcctcgcgt | tgcgctcctg | ttccctagat | tcttataaag | gtcccggaaa | cgacattatg | 1020 |
| attcttgggg | aaaatgacgc | aatcaacatt | gtttctgcaa | gtccctatat | ggaaattttt | 1080 |
| gctttgcaag | gcaaagaaaa | attttggaat | gcagactttt | tgattaatat | tccttacaaa | 1140 |
| gaagaggcgc | tcattgttaat | ttttgaaaaa | aaagtgcact | ctgagaaagg | aagattcttt | 1200 |
| acgaagatga | attaa | | | | | 1215 |

Seq ID 14

| | | | | | | |
|-------------|------------|------------|------------|-------------|-------------|------|
| atgacaaaaga | tagctttttc | tgaaggga | aagaattttc | ctgtagaggc | attaaaaaaa | 60 |
| tgggtttgaaa | aaaataaacg | atctcttct | tggagagata | acccgactcc | ctatagtgtg | 120 |
| tgggtttccg | aagttatgct | acagcaaacg | cgagctgaag | ttgttataga | ttattttaat | 180 |
| cagtggatgg | agagatttcc | taccatagag | tctttagctg | cagcaaaaaga | agaagatgtc | 240 |
| attaagttaa | gggagggatt | gggttattat | tctcgagcgc | gccatctttt | agagggagct | 300 |
| cgcatggtta | tggaggagtt | tcatggaaag | atccctgatg | atgccatttc | cttagctcaa | 360 |
| attcgtggag | tgggtcctta | tacggttcat | gctattctag | cctttgcttt | taagaggcgt | 420 |
| gctgctgctg | tggatggcaa | tgtcttgctg | gttcttagcc | ggatattttt | gatagaaact | 480 |
| tctatagact | tagaatcaac | tcttacttgg | gtttctagga | ttgctcaagc | gcttcttctc | 540 |
| cataagagtc | ccgaggttat | agctgaggtt | ctgatatagc | tgggagcttg | tatctgtaaa | 600 |
| aaagtctctc | aatgtcatcg | ttgtcttgct | cgtaagcat | gtggagcttg | gagggagaaac | 660 |
| aaacagttcg | tattgcccgt | acgtcatgcc | agaaaaaagg | tcattctttt | gcacggttg | 720 |
| gtagcgattg | tattgtacga | tggctctttg | gttgtcgaga | agagacgtcc | taaagaaatg | 780 |
| atggcaggct | tatatgaatt | tccttatatt | gaagtgaac | cagaggaagg | tcttcaagat | 840 |
| atagaaggat | ttactaagaa | gatggagctt | tctttagaaa | gccctttgga | attcttaggt | 900 |
| aaccttaaa | aacagcggca | tgcgtttact | aatcataagg | ttcattttgt | tcctataatt | 960 |
| tttaaaagcca | cttctctgce | tcagttcggg | gaattgcac | ttttgagtga | tatagatcac | 1020 |
| ttagcttttt | cttcaggaca | caaaaagatt | aaagatgctt | tgctaatacta | cctcggggat | 1080 |
| gtcagggtcta | gagaatcaat | aggagtatat | | | | 1110 |

Seq ID 15

| | | | | | | |
|------------|-------------|------------|-------------|-------------|-------------|------|
| atggcagttt | cagggtggcg | aggggttcag | ccttcttcgg | atccaggaaa | gtggaatcct | 60 |
| gctctgcaag | gagagcaggc | agaaggcccg | tctccgctaa | aagaatctat | attttctgaa | 120 |
| accaagcagg | cctcctctgc | tgcgaagcag | gaaagcttag | tgcgttcagg | atctacagga | 180 |
| atgtatgcaa | cagaatctca | gataaataag | gctaagtatc | gtaaaagctc | agatcgatca | 240 |
| tcaacctctc | caaaatccaa | attgaaagg | acattttcta | aaatgcgcgc | tagtgtgcaa | 300 |
| ggattcatgt | caggatttcg | atctcgggct | tcgagagtgt | cagcaaaagc | tgcctccgat | 360 |
| agtgggtgag | gaacatcctt | attgccgaca | gagatggatg | ttgctctaaa | gaagggaaac | 420 |
| cgtatttcac | ctgaaatgca | gggatttttc | ttagatgctt | cgggtatggg | agggagtcc | 480 |
| tctgatattt | ctcagctttc | tttagaggct | ttgaaatcct | cagcattttc | aggtgccagg | 540 |
| agtttaagtt | taagctcttc | agaatctagt | tccgtggctt | cgtttggatc | tttccaaaag | 600 |
| gccatagagc | ctatgagtga | ggagaaggta | aatgcttgga | cagtggctcg | tttaggaggg | 660 |
| gagatgggtc | gctctcttct | cgatcccaat | gttgagacct | catcattagt | gcgcagggca | 720 |
| atggcaacag | gcaacgaagg | catgatagat | ctttctgatt | taggacagga | agaggtcagt | 780 |
| acagccatga | catctcccag | agcagtagaa | ggaaaagtaa | aggtatcttc | ttctgattct | 840 |
| ccagaagcga | atccaacagg | aattccaaat | tctaataact | tagaaaagggc | ggaaaaggaa | 900 |
| gcagagaaac | aagaaagtcg | agagcagttg | agtgaggatc | agatgatgct | tgcacgtgct | 960 |
| atggctgggc | ttcttacagg | ggcagcgcct | caagagggtat | tgagtaattc | tgtttggtct | 1020 |
| ggctcttcta | cagtattttc | tcctcccaag | ttttcaggaa | ctttaccac | ccagagatcg | 1080 |
| ggagataaat | caaagcataa | atctccagga | atagagaaga | gtacgaacca | tacgaacttt | 1140 |
| tctcctcttc | gggaagggtac | tgtgaagagt | gctgagggtta | aaagtttgcc | tcattccagaa | 1200 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|------------|------|
| agtatgtatc | gttttctctaa | agatagcatc | gtttccaggg | aggaacctga | agccgttggt | 1260 |
| aaagaatcta | cggcattcaa | aaatccagag | aatagcagtc | aaaactttct | ccctattgct | 1320 |
| gtggagagtg | ttttccctaa | ggaaagtggg | acgggagggg | cttttaggaag | tgatgctgtg | 1380 |
| agttccctcat | atcatttccct | tgcgcaacgt | ggagtgtctt | tactcgtctc | tctacctcgt | 1440 |
| gctactgatg | actataaaga | gaagctcgaa | gctcataaag | gtcctggagg | tcctccagat | 1500 |
| ccttttgattt | atcagtatcg | aaatgttgct | gttgagccgc | caattgttct | ccgttctccc | 1560 |
| cagccgtttt | caggatcttc | acgtctatcg | gttcaaggaa | agcctgaagc | tgcttcagtt | 1620 |
| catgacgatg | gtgggggggg | aaatagtggg | ggtttttagcg | gagatcaaag | aagaggatct | 1680 |
| tcgggccaga | aagcttcccg | tcaggaaaaag | aagggaaaaa | aattatctac | ggatatttag | 1740 |

Seq ID 16

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|-------------|------|
| atgaaacgaa | gatcatggct | taaaattttg | ggaatctggt | taggcagcag | cattgtcttg | 60 |
| ggattccctta | tattcttgcc | ccaactactt | tcaacagaat | cagggaaata | ccttgtgttt | 120 |
| tccttgatcc | ataaagaatc | cggactctcg | tggtctgctg | aagaacttaa | gatttcatgg | 180 |
| tttggacggc | aaacagctag | aaaaataaaa | ctcactggag | aagctaaaga | tgaggctctt | 240 |
| tctgtgaga | aattcgaact | cgacggatct | ctattacgtc | ttctgattta | taaaaagcct | 300 |
| aaagggatta | ctctatcagg | atggtcttta | aaaattaatg | agcctgcctc | tatagaccat | 360 |
| ccttctgtga | gtcacttaga | tccaggatct | ttacttacct | acctaaatga | ctgcaagatt | 420 |
| atctctgagc | acggatttat | cactatgaag | acagtatcag | gatcttcatt | atctgtatca | 480 |
| gggttttatc | tagagaaatc | ctcagaaaag | ttcatgacga | aatgcgtggg | ctctgaagat | 540 |
| cagcaatccg | ggaacatctt | tatagagagt | gtactttctc | ctgatgtcag | tatttccgct | 600 |
| cagttttctt | cagttcccg | tgcatttttt | aaaattttta | tagcttcccc | tttctgggac | 660 |
| catcttctct | cttatgaaga | cataatcaat | ctatcagcag | aggcaacaca | taccaatgat | 720 |
| ggtaagattt | ctatgacagc | ctctggcgag | ggaaatcaaa | ttcaaatgaa | gcttcaaggc | 780 |
| catattcata | aatccacatt | ttatattgta | gaagggagtt | cttcgttcat | agaacttaa | 840 |
| cctgagctcg | cctcagctct | ttgcaaccag | atcattccgc | tgtccacacc | cattactagt | 900 |
| aagcaaatcc | atgtacggg | ctcttatgct | aaaattccct | tggatattac | gaaatggaaa | 960 |
| catattgaaa | ttacctctca | agcacagctc | cctgaagtcg | caatacatcc | gaaagaccct | 1020 |
| aatcttgcac | tacagctgcg | cgacacaaaag | ctaggaatta | aaaagacgga | gaaattctca | 1080 |
| gacatccggt | actcctcate | tacagtctta | ggaggagctt | ctccctctca | ccttaatggg | 1140 |
| ttaatcagta | tagataacaa | aaaacatctt | actaaatttc | gtctacaaca | agcacaaact | 1200 |
| ccccacacct | atctaagagc | cattttccct | caacctttcg | tgatcaatgt | tcctcctggg | 1260 |
| gttgccttatt | attccttaaa | tatcgaaggg | acgtacaaaa | atgctcactt | agaggcagat | 1320 |
| gctatccctag | ataaccgct | attgaaattg | tcctgctcca | tgctctggagc | atggaaaaat | 1380 |
| tttcttttta | aagggcaagg | aacgtaccac | tttaataaaa | aatggcagga | gattctctct | 1440 |
| cccactttct | cttacgctga | agctagatcc | tcaggaaaag | cacaaattac | cgatacgaat | 1500 |
| ctctttttcc | ctaaattttc | tggaaaaatt | actgcaagag | aaaatgagct | gtcatcccat | 1560 |
| gcaaaatttg | gttcccctaa | tgaacctata | aaacctgaaa | ctacctctat | actcatccac | 1620 |
| ggacaatttt | gttctctgcc | actcagccta | gtttctaate | acctagcccc | cttccatttg | 1680 |
| aagaaattga | catttttctt | ccatacggat | ggaggtaagt | ttgtaaccaa | aggaaaacct | 1740 |
| caagctctta | ttgagaatcc | agactatccc | gacctaaata | atacgcgtat | cctaattccct | 1800 |
| gatcttcttc | tttctcttga | tgaatcctca | acttcacctt | cttcaaaaaga | cttgaaaatc | 1860 |
| cagggttctg | gagagatatt | ttctttgcct | ctggattcta | ttactaagac | ctatgggaaa | 1920 |
| caagtgcgct | tctctcctta | ttttggttcc | tctggagact | tgaactttgt | agtaaaactac | 1980 |
| aatcctaagg | atcagaataa | gctcacacta | ctatctaact | ttaagtccga | agctctccta | 2040 |
| ggagaactga | agttagtcat | ggacttttct | atgaagctat | cttcaggaa | tcagggaact | 2100 |
| ctccagtggt | aagtgcgccc | agaacgttat | gcaagtttct | ttaaaaacgc | atcatgctct | 2160 |
| cccacctggt | tgcttcatag | aactgcaaat | gtacgcttag | acatctcaaa | actctcttgt | 2220 |
| ccagaggaaa | ccaaagggtt | atcttgtctc | acgcttcttg | ccgcaggagg | acttgaagggt | 2280 |
| tcattagaag | caacacggtt | gatcttctat | gataatgtgt | ctaaaagagac | ttttattatt | 2340 |
| aatgacttta | aaggttcttt | gcgagccaac | aatcttagacg | ctaaaataga | atatgatctt | 2400 |
| aaaggctcgt | gtctagctcc | taggcaagac | tctaaaactc | ttgcagaatt | ttcattagaa | 2460 |
| ggacaggtag | atcatctggt | ctctccagag | tctcgagaat | ttaaacaaac | tgcaaatggg | 2520 |
| attcacatac | cctcttctgt | cattgctgga | atcattccca | tgtctccagg | attgaaagct | 2580 |
| cagatatcct | cgttgcagc | ccctagaatc | aacgtatcaa | ttaaaaatgc | gttccgattt | 2640 |
| ggagaaggcc | ctgtcgacat | tatggtcgac | tctgaaaacc | ttcaagctca | gattccactg | 2700 |
| atcttaaacg | aaaagtcct | cttactgaga | gagaatctaa | cagcgcacct | tagtataaat | 2760 |
| gaagatgtaa | ataaggcttt | cctacaagag | tttaatcccc | tcttagcagg | gggagcctac | 2820 |
| tcacaatacc | cagtaacctt | agagatcgat | aaacaaaact | tctatctccc | tatacgcccg | 2880 |
| tattcttttg | aagaattccg | catccaatcc | gcaacattgg | atatggggaa | aatctcaata | 2940 |
| gcaaaatacag | gaactatgta | tgctcttttc | caattccttg | atattacgga | tcaaaagcaa | 3000 |
| ttgtagaat | cttgggtcac | tccaattttc | ttttctgtac | aaaaaggctc | tatcatttgt | 3060 |
| aagcgcytcg | acgcccttat | cgatcgtaga | atccgccttg | ctctatgggg | gaaaactgat | 3120 |
| atcgctcatg | atcgctctgt | tatgaccttg | ggtatcgatc | ctgaagttat | taagaaatac | 3180 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|------|
| tttcataaca | cctctttaaa | aactaaaaac | ttcttcctta | taaaaatccg | aggatccatc | 3240 |
| tcgtctcctg | aagtggactg | gtcttcagct | tacgctagaa | tcgctctatt | aaaaagctac | 3300 |
| agtcttggga | acccgtttag | tagtcttgcc | gataagctat | tctcttctct | tggcgactct | 3360 |
| acccccccac | caacagtaca | cccttccct | tgggaaaaat | ctaattttga | ttctatagaa | 3420 |
| aataaatag | | | | | | 3429 |

Seq ID 17

| | | | | | | |
|------------|------------|-------------|------------|------------|-------------|------|
| atgtcatctc | ctgtaaataa | cacacccctca | gcaccaaaca | ttccaatacc | agcgcccacg | 60 |
| actccaggta | ttcctacaac | aaaacctcgt | tctagtttca | ttgaaaagg | tatcattgta | 120 |
| gctaagtaca | tactatttgc | aattgcagcc | acatcaggag | cactcggaac | aattctaggt | 180 |
| ctatctggag | cgtaacccc | aggaataggt | attgcccttc | ttgttatctt | ctttgtttct | 240 |
| atggtgcttt | taggtttaat | ccttaaagat | tctataagtg | gaggagaaga | acgcaggctc | 300 |
| agagaagagg | tctctcgatt | tacaagttag | aatcaacggt | tgacagtcac | aaccacaaca | 360 |
| cttgagactg | aagtaaagga | tttaaaagca | gctaaagatc | aacttacact | tgaaatcgaa | 420 |
| gcatttagaa | atgaaaacgg | taatttaaaa | acaactgctg | aggacttaga | agagcagggt | 480 |
| tctaaactta | gcgaacaatt | agaagcacta | gagcgaatta | atcaacttat | ccaagcaaac | 540 |
| gctggagatg | ctcaagaaat | ttcgtctgaa | ctaaagaaat | taataagcgg | ttggggattcc | 600 |
| aaagtgtgtg | aacagataaa | tacttctatt | caagcattga | aagtgttatt | gggtcaagag | 660 |
| tgggtgcaag | aggctcaaac | acacgttaaa | gcaatgcaag | agcaaattca | agcattgcaa | 720 |
| gctgaaatcc | taggaatgca | caatcaatct | acagcattgc | aaaagtcagt | tgagaatcta | 780 |
| ttagtacaag | atcaagctct | aacaagagta | gtaggtgagt | tgtagagtc | tgagaacaag | 840 |
| ctaagccaag | cttgttctgc | gctacgtcaa | gaaatagaaa | agttggccca | acatgaaaca | 900 |
| tctttgcaac | aacgtattga | tgcatgcta | gcccagagc | aaaatttggc | agagcaggctc | 960 |
| acagcccttg | aaaaaatgaa | acaagaagct | cagaaggctg | agtcagagtt | cattgcttgt | 1020 |
| gtacgtgatc | gaactttcgg | acgtcgtgaa | acacctccac | caacaacacc | tgtagttgaa | 1080 |
| ggtgatgaaa | gtcaagaaga | agacgaagga | ggtactcccc | cagtatcaca | accatcttca | 1140 |
| cccgtagata | gagcaacagg | agatggtcag | taa | | | 1173 |

Seq ID 18

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|------|
| atgcgatatg | accccaactt | aatagaaaaa | aaatggcaac | aattttggaa | agaacatcga | 60 |
| agctttcaag | caaatgaaga | cgaggataaa | gtaaaatatt | atgttttaga | catgttccct | 120 |
| tatccttcag | gagcaggtct | acatgtaggc | caccttattg | gctatacagc | gacagatatt | 180 |
| gttgcgagat | ataaaaagagc | acggggattc | cagttctctc | atcctatggg | ctgggatagc | 240 |
| tttggtttgc | ccgcagaaca | atatgcatg | cggacaggaa | cccatcctaa | agtcacgacc | 300 |
| cagaagaata | tcgctaattt | taaaaaacag | ctctccgcta | tgggattttc | gtatgatgaa | 360 |
| ggacgagaat | ttgctacgag | tgatcccgac | tattatcatt | ggactcagaa | acttttccct | 420 |
| tttctttatg | atcaaggact | cgcctatatg | gccgacatgg | cagtgaacta | ctgtccagaa | 480 |
| cttggtaccg | tattatcgaa | tgaagaagtt | gaaaatggat | tctcaataga | agggggatat | 540 |
| cctgtagagc | ggaaaatgct | tcgtcagtg | attctcaaaa | tcacagcata | tgccgataag | 600 |
| ttattagaag | gtctcagatc | cctagattgg | cccgaataatg | taaagcagtt | acagaaaaat | 660 |
| tggataggga | aatctgaagg | ggctctcgta | acatttcatt | tgacgcaaga | gggcagtcct | 720 |
| gaagccttca | ctaccgcct | agacacttta | ttaggggtga | gtttcttagt | gattgtcct | 780 |
| gagcaccagc | attttagatc | tatagttagt | gaagagcaaa | gagacgaagt | cacagcctat | 840 |
| gtacaagaga | gtctcaggaa | aagtgaacga | gatcgcatca | gctctgttaa | gacaaaaaca | 900 |
| ggggctctta | caggaaacta | tgccaagcac | cccattacag | ggaacctttt | acctgtttgg | 960 |
| atttcagatt | atgtcgtctt | aggctatggc | acaggcgtag | ttatgggagt | cccagcgcct | 1020 |
| gacgagagag | atcgagagtt | tgctgaaatg | ttttctcttc | cgattcatga | ggtgattgat | 1080 |
| gataacgggg | tttgtattca | tagcaattac | aacgactttt | gtcttaaatg | cttgtctggg | 1140 |
| caagaagcta | aagattatgt | aatcaactca | ctggagatgc | gttctctcgg | aagagctaag | 1200 |
| actatgtaca | ggctgcgagc | ctggctcttc | tctagacaga | gatattgggg | agagcctatc | 1260 |
| cccatcattc | attttgaaga | tggaacgcac | cgtcctttag | aagatgatga | gctgcctctt | 1320 |
| ctccctccga | atattgatga | ctatcgtccc | gaaggattcg | gtcaggggtc | tttagcgaag | 1380 |
| gctcaagatt | gggtgcatat | ctacgacgag | aagacaggtg | gaccaggatg | tagagagact | 1440 |
| tatactatgc | cacagtgggc | aggctcttgc | tggtattatc | ttcgtttctg | tgatgcacac | 1500 |
| aactctcagt | tgctttggag | taaagaaaaa | gaaagctatt | ggatgcctgt | agatctttac | 1560 |
| attggagggtg | cagaacacgc | tggtcttcat | cttcttact | cgagattttg | gcatcgagtc | 1620 |
| ttctatgacg | cgggtcttgt | ctcaacacca | gaacctttta | agaaactgat | caaccaggga | 1680 |
| cttgtgttag | cctcttcata | ccgaattcct | ggtaagggat | acgtaagcat | agaagacgtt | 1740 |
| agggagaaga | atggaacgtg | gatctcaact | tgtggagaga | ttgtggaagt | tagacaagag | 1800 |
| aaaatgtcta | aatcgaaact | caatgggtgtg | gatcctcagg | ttttgattga | agagtatggt | 1860 |
| gcagatgcct | tacgtatgta | cgctatgttt | tcgggacctt | tggaataaaa | taaaacctgg | 1920 |
| tccaatgaag | gtgttggggg | gtgcccgtct | ttcctaaatc | gtttttatga | tttggtgact | 1980 |
| tcgtcagagg | ttcaagatat | agaagaccgt | gacgggctgg | ttctcgtctc | caaatttggtg | 2040 |
| tttaggatta | cagaacatat | tgaaaaaatg | tctttgaata | ccataccgtc | ttcatttatg | 2100 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|------|
| gaatttctga | acgatttttc | aaagcttcca | gtctattcta | aacgtgcctt | gtctatggct | 2160 |
| gttcgtgtat | tggagcctat | agctccgcat | atcagcgaag | agttatgggt | tatattggga | 2220 |
| aaccaccag | ggattgatca | agcagcatgg | cctcaaatag | acgagagtta | cctagttgct | 2280 |
| caaactgtga | cttttgttgt | tcaggttaat | gggaagttac | gaggacgtct | cgaggtagcc | 2340 |
| aaagaagctc | ctaaagaaga | agttttatct | ttgtctcgaa | gtgtagtgtc | aaagtatcta | 2400 |
| gagaacgctc | aaatacgaaa | agaaatttat | gttcctaata | aactagttaa | ttttgtccta | 2460 |
| tga | | | | | | 2463 |

Seq ID 19

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|------|
| ttggagaaaa | taattgttcg | agaaaaattct | cgagacattg | gagttctttc | taaagaagga | 60 |
| ctatttgata | aatttagagat | aggcatagct | tcagatatta | caattcgtga | taaatgggtct | 120 |
| tgtggagaaa | tcaaaaagcc | agaaactata | aattaccgta | cgtttaaacc | tgaaggggc | 180 |
| gggtctat | gtgaaaaaat | ctttgttcct | actaaagatt | gggaatgttg | ctgcggaaaa | 240 |
| tataaaaaa | taaaacataa | aggaattgtc | tgcgatcgat | gcggagtgtg | agttactctt | 300 |
| tcaaaagtc | gtcgtgaacg | tatggtcat | atcgagttag | cagttcctat | tgtccatatt | 360 |
| tggtttttca | aaacaactcc | atcacgcatt | ggtaatgttc | ttggaatgac | agcttcggat | 420 |
| ctggaacgtg | tcatttatta | tgaagaatat | gtagttattg | accaggtaa | gacagacct | 480 |
| actaaaaaac | aacttcttaa | tgatgcgcaa | tatcgtgaag | ttgttgagaa | gtggggtaag | 540 |
| gacgctttcg | ttgctaaaat | gggtggcgaa | gctatctatg | atttgcttaa | atccgaagat | 600 |
| ctccaaagct | tgtttaaaga | tcttaaagag | cgtttacgca | aaacaaaatc | tcagcaagcg | 660 |
| agaatgaagt | tagccaaacg | tcttaaatac | attgagggat | ttgtttcttc | atccaaccac | 720 |
| cggagtgga | tgtatttaaa | aaatatccca | gtagttccac | ctgatctccg | tcctcttgtt | 780 |
| ccttttagatg | gcggtcggtt | tgcgacttct | gatttaaacy | atctctaccg | ccgtgtaatt | 840 |
| aatcgtaaca | atcgtcttaa | agcgatctta | cgtttaaaaa | caccagaggt | tattgttcgt | 900 |
| aatgaaaagc | gtatgcttca | agaagctgtt | gatgctcttt | ttgataacgg | tcgacatggt | 960 |
| catccggtca | tgggagctgg | aaaccgacca | ttgaaatcct | tgtcagaaat | gttaaaggga | 1020 |
| aaaaatggac | gcttcggtca | aaatctttta | ggaaaacgtg | ttgactactc | tggacgttct | 1080 |
| gtaattattg | ttgggtcctga | attgaagttt | aatcaatgcy | gattgcctaa | ggaaatggct | 1140 |
| ttagagctat | tcgaaccctt | tattattaaa | agactaaaag | atcaaggcag | cgtttatacc | 1200 |
| attcgttctg | ctaagaaaat | gattcaacga | ggagccccag | aagtttggga | cgttctcgaa | 1260 |
| gagatcatta | agggacatcc | agtacttctt | aaccgagcac | ctacattgca | ccgttttagga | 1320 |
| tccaagctt | tcgaaccctgt | attgatagaa | gttaaagcga | ttcgtataca | ccccctagtt | 1380 |
| tgcgcagcgt | ttaacgctga | cttcgacgga | gaccaaatgg | ccgtgcacgt | tcctctatct | 1440 |
| gtagaggcac | aactggaagc | taaagtttta | atgatggctc | cagacaacat | cttccctcct | 1500 |
| tcctcaggaa | agcctgtggc | tattccttcg | aaagatatga | ctttaggatt | atattatctg | 1560 |
| atggcagatc | ctacctat | tcctgaagaa | catggaggaa | aaactaagat | atttaaagat | 1620 |
| gaaatcgaag | tattgcgtgc | tttaataaac | ggtggattca | ttgatgatgt | tttcggagat | 1680 |
| cgtcgtgatg | aaacaggacg | cggatccat | attcatgaaa | agattaaagt | gcgtattgat | 1740 |
| ggacaatta | ttgagacaac | cccagggaag | gtattgttca | acagaattgt | tcctaaagaa | 1800 |
| ctcggcttcc | aaaattacag | catgccaaag | aagcgtataa | gtgagcttat | tttacagtgc | 1860 |
| tataagaaag | tcggtttaga | agctactgta | cgtttcttag | atgaccttaa | agatcttgga | 1920 |
| tttattcaag | ctacaaaagc | cgcaatctct | atgggattga | aggatgttcg | tattcctgat | 1980 |
| atcaagagtc | atatcctcaa | agatgcctac | gataaggttg | ctatcgtcaa | aaaacaatat | 2040 |
| gatgatggga | tcattactga | aggggagcgt | cattccaaaa | ctattagtat | ttggactgaa | 2100 |
| gtttccgaac | agctttcaga | tgcctctctat | gttgaaatta | gcaaacaaac | acgtagcaag | 2160 |
| cataaccctt | tgttctgat | gattgattct | ggagcccgag | gtaataaatc | ccagttgaaa | 2220 |
| cagttgggag | cgttacgagg | attaatggcg | aagccaaacg | gagcaattat | tgaatctcca | 2280 |
| attacttcga | acttttagaga | aggattgaca | gttttagagt | actccatctc | ctcacacggt | 2340 |
| gcgagaaaag | gttttagccga | tacagctcta | aaaactgccg | actccggata | cttaacacgt | 2400 |
| agactgttag | acgtagccca | agacgtgatc | attaccgaaa | aagattgcgg | tacgttaaat | 2460 |
| cacattgaga | tttctgcaat | aggtcaaggt | tctgaagaac | tcttgccctc | taaagatcgt | 2520 |
| atctatggac | gtactgtagc | tgaagatgtc | tatcaaccag | gtgataaaag | tcgactactt | 2580 |
| gctcaatcgg | gtgatgtact | caactccgta | caagcagaag | caattgatga | tgcgggtatt | 2640 |
| gagacaatta | agattcggtc | tacattaacg | tgcgaaagtc | ctcgcggagt | ttgtgcaaa | 2700 |
| tgttacggcc | tcaatttagc | taattgtaga | ctcattggca | tgggtgaagc | tggttggtatt | 2760 |
| attgctgctc | agtcgattgg | ggaaacctgga | actcagttaa | caatgagaac | gttccacct | 2820 |
| gggggtattg | ctgctacgtc | ttcaactcct | gagattatta | cgaatagtga | tggtatctta | 2880 |
| gtctacatgg | atctccgtgt | tggtctgggg | caagaaggtc | acaatcttgt | cttgaataag | 2940 |
| aagggagctt | tacatgttgt | aggtgatgaa | ggtcgtactc | tcaatgagta | taaaaagctg | 3000 |
| ctttcaacca | agtctataga | aagcctagag | gtatttctctg | tagaactagg | agtgaataat | 3060 |
| cttgttgctg | acggaaactcc | tggttctcaa | ggacaaagaa | tcgcagaagt | tgaactacac | 3120 |
| aatattccta | tcatttgcga | taagcctggc | tttattaaat | atgaagattt | ggttgaggga | 3180 |
| atctctacag | agaaagttgt | gaacaagaac | acaggacttg | ttgaacttat | tgtgaaacag | 3240 |
| caccgagggg | agttacatcc | tcagattgct | atctatgatg | atgctgactt | gtcagaactt | 3300 |

| | | | | | | |
|------------|------------|------------|-------------|-------------|-------------|------|
| gtcggaacct | atgcgattcc | ttcaggagcg | attatctctg | tagaagaagg | acaacggggt | 3360 |
| gatccaggta | tggtgttagc | tagacttcct | cgcgagagcta | tcaaaacaaa | agatattact | 3420 |
| ggcggtttgc | ctcgtgttgc | tgaattagta | gaagctcgta | aacctgaaga | tgctgctgac | 3480 |
| atcgccaaaa | ttgatgggtg | tggtgacttc | aaaggaattc | aaaagaacaa | acgtattctt | 3540 |
| gttgtctgtg | atgaaatgac | aggtatggaa | gaagaacatc | tgattccatt | aaccaaacat | 3600 |
| ttgattgtac | aacgtggaga | tagtgtgatt | aaagggcagc | agcttaccga | tggtttagtt | 3660 |
| gttcctcatg | aaatcctaga | aatttgcgga | gttcgtgaac | ttcagaagta | cctggtaaatt | 3720 |
| gaggtgcagg | aagtttaccg | tctgcagggc | gttgacatta | acgataagca | tattgaaatt | 3780 |
| attgttctgc | agatgttaca | aaaagtagca | attactgacc | caggtgatac | gactctgctc | 3840 |
| tttggcgaa | acgtgaataa | gaaagagttt | tatgaagaaa | atcgtcgtac | cgaagaagac | 3900 |
| ggtggtaagc | cagctcaagc | tggtcccgtc | ttattgggaa | ttacgaaagc | ttctttgggt | 3960 |
| acggaatcgt | ttatatcagc | agcttctttc | caagacacaa | ctcagagtctt | aacagatgca | 4020 |
| gcttggtgta | gcaaaaccga | ctaccttctt | ggatttaagg | aaaatgtgat | catgggtcat | 4080 |
| atgattcctg | gtgtacagag | ctttgaaacg | cataagcgta | ttaagcagta | tctagaaaaa | 4140 |
| gaacaagaag | atctcgtttt | tgattttgtt | agtgaacacg | agtgtgtttg | ttaa | 4194 |

Seq ID 20

| | | | | | | |
|-------------|-------------|-------------|------------|------------|-------------|------|
| atggatacac | agtcctctat | aggtaacgaa | gaatggcgta | ttgcaggaa | ctctgtagtt | 60 |
| tctgggatgg | ccttaggtaa | agtatttttt | ttgggaacat | cccccttgca | tgttcgtgag | 120 |
| ctgactctac | ctcaagaaga | agtcgaacat | gaaatacatc | gttattataa | agctttgaat | 180 |
| cgctcgaagt | ctgatatcgt | agcttttagaa | caggaagtta | cgggacagca | aggccttcaa | 240 |
| gaggtttcct | ctatcctaca | agcacacttg | gagattatga | aagaccctct | ccttacggag | 300 |
| gaggtggtca | atactatccg | taaggatcgt | aaaaatgcag | aatatgtctt | ttcttcagtc | 360 |
| atgggtaaaa | tagaagagtc | gttaacagca | gtccgcggga | tgcttctctg | tgtagatcgt | 420 |
| gttcaagata | tccatgatata | ctccaataga | gttatcggcc | atctgtgttg | ccaacataag | 480 |
| agttcttttag | gagaatctga | tcagaatttg | atcatattct | ctgaggaatt | gacccctca | 540 |
| gaagtcgcca | gtgctaactc | tgcttatatc | cgagggtttg | tctcattagt | gggagcagcc | 600 |
| acatcacata | cagctatcgt | ctcgcgagca | aagagcattc | cctatcttgc | taatatctcc | 660 |
| gaggagcttt | ggaacatcgc | aaagcgatat | aatggcaagt | tagtcttaat | cgacggttat | 720 |
| cgtggagagc | taatctttta | tcctaaacca | gcgactctac | aaagctgcta | taaaaaagag | 780 |
| ctttccgctg | ttgccataac | ctctcagaga | ttagtaagaa | agtccttaca | cccgattggt | 840 |
| tcttcgcatg | caggcagtgta | taaggacgta | gaagatctat | tagagaactt | ccctcaaac | 900 |
| tcctataggc | tctttcgttc | tgagttttta | gctgttaatt | taggacgcct | acctacacta | 960 |
| agagagcaag | tagatcttta | cgagaagctc | gcacgttttc | ctggagattc | gccctcagta | 1020 |
| ctgcgcctct | ttgatttttg | tgaagacaaa | ccttgtcctg | gaataaaaaa | taagaaagaa | 1080 |
| cgttctatac | gatggttgct | agactatagt | gtgattcttg | aggatcagct | ccaagcaatt | 1140 |
| gctaaagcct | ctttgcaagg | ctccataaag | gttctcatte | caggagtgct | tgacgtttct | 1200 |
| gagattatag | aagtcacaaa | gaaatgggag | accatccaga | cgagggtccc | taaaaggccat | 1260 |
| aaggtttctt | gggggactat | gatagaattt | ccttctgcag | tttgatgat | tgaagagatc | 1320 |
| cttctgaat | gtgattttct | ctctataggg | acgaatgacc | ttgtccaata | tactttggga | 1380 |
| atttccaggg | aatccgctct | tcctaaacat | ctaaatgtaa | ctttgcccc | agcagtgatc | 1440 |
| cgcattgattc | accatgtact | tcaagctgcg | aagcaaaatc | aggttcctgt | tagcattttgt | 1500 |
| ggagaggccg | cagggcagct | cagtctgact | cctttattta | taggcctagg | agttcaagag | 1560 |
| ctctcagtag | ctatgcctgt | aatcaataga | cttcgcaatc | atatcgccct | gctagagttg | 1620 |
| aactcctgcc | ttgaaattac | agaagccctt | ttacaagcta | aaacatgctc | tgaagttgaa | 1680 |
| gaacttttaa | atagaacaaa | caaaatcaca | tcataa | | | 1716 |

Seq ID 21

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| atgcgacaag | aaaaggatag | tttaggaatc | gtagaagttc | ctgaggataa | gttatatgga | 60 |
| gtcacaacta | tgcgttctag | gaattttttt | tcttggggac | ctgagttgat | gccttatgag | 120 |
| gtaatacgag | ctctcgtatg | gattaaaaaa | tgtgctgctc | aggcgaatca | agatttagga | 180 |
| tttttggtg | ccaagcattg | cgatatgatt | gttgctgctg | ccgatgagat | tttagaggga | 240 |
| ggttttgta | agcatttccc | tttaaaagtt | tggcagacag | ggagcggcac | acaatcta | 300 |
| atgaatgtga | atgaggtgat | tgccaatcct | gccattcgtc | atcacggagg | gggtgttaggc | 360 |
| agtaaggatc | ctatccatcc | taatgatcat | gtgaataagt | cccaatcgtc | caatgatgtt | 420 |
| ttccctacag | caatgcatac | cgctgctgtg | attagtttaa | aaaataagtt | aattccagct | 480 |
| ttagatcata | tgattcgggt | gttagatgct | aaagtggaa | aatttcgtca | tgatgtaaag | 540 |
| ataggacgga | cccatcttat | ggatgcggtg | cctatgacgt | tgggtcagga | attttctggt | 600 |
| tatagcagtc | aattgcgtca | ctgcttagag | agtatagcat | ttctcttagc | tcatttatat | 660 |
| gaacttgcca | ttggagctac | tgctgtaggg | actgggttga | atgttcctga | aggggtcgtg | 720 |
| gaaaagatca | tccattattt | aaggaaggaa | acagatgaac | cgtttatctc | agcttccaat | 780 |
| tatttttcag | cactgtcttg | tcacgatgct | ttagtagatg | cccatgggtc | tttagcaact | 840 |
| ttagcatgtg | ctttaactaa | gatagctacg | gatttgagct | tttttaggtc | aggacccagg | 900 |
| tgtgggttgg | gtgagttatt | tttccctgaa | aatgaaccag | gatcttctat | catgcctggt | 960 |

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|------|
| aaagtcaatc | ctacgcagtg | tgaagctctc | caaatggttt | gtgctcaagt | tcttggaat | 1020 |
| aatcaaacag | tgattattgg | aggaagtcga | ggaaattttg | agcttaatgt | gatgaagcct | 1080 |
| gtgatcatct | ataatttcct | gcagtcctgt | gatctccttt | ctgaggggat | gagggctttc | 1140 |
| tctgaattct | ttgtgaaagg | attaaaagta | aataaagctc | gtttacaaga | taatatcaat | 1200 |
| aattctttga | tgttggttac | agcttttagct | cctgtattag | gttacgacaa | gtgttcgaaa | 1260 |
| gcagcactga | aagcatttca | tgaatctata | tctttgaagg | aggcgtgtct | agctttggga | 1320 |
| tatctttctg | agaaggaatt | tgatcgttta | gtggttcctg | agaatatggt | gggaaaccat | 1380 |
| tag | | | | | | 1383 |

Seq ID 22

| | | | | | | |
|-------------|------------|------------|-------------|-------------|------------|-----|
| atgggactat | atgatcgtga | ctatatacaa | gattctcagag | tgcagggaaac | ttttgcttca | 60 |
| agagtctatg | ggtggatgac | agcagggcta | atcgtaactt | catgtgttgc | cctgggtcct | 120 |
| tatttttctg | gattatacag | aagtttattt | tctttttggt | gggtgtggtg | tttcgctacg | 180 |
| ctaggcgtgt | ctttctttat | caactctaaa | atccagacac | tatcggtttc | tgctgtaggg | 240 |
| ggccttttcc | ttctctactc | aacattagaa | ggaatgtttt | ttggaacctt | acttcctgtc | 300 |
| tacgtctctc | aatatggcgg | aggggtgac | tgggcgcgtt | ttggatcagc | agccttggtg | 360 |
| tttgctttag | cagcagtata | cggagcgttt | acaaaaagcg | atcttactaa | aattagtaag | 420 |
| attatgactt | ttgctttgat | aggacttctg | ctagtgtactc | tagtctttgc | tgtggtttcg | 480 |
| atgtttgtat | ctatgccttt | aatctactta | ttgatttgct | atctagggtc | cgtcatcttt | 540 |
| gttggtattga | cagctgctga | tgcgcaagca | attcgctcgga | tttctcttac | tataggggat | 600 |
| aacaatacct | tgagttacaa | actctctttg | atgtttgtct | ttaagatgta | ttgcaatgtc | 660 |
| atcatggtat | tttggatctc | gctgcagatt | ttctcatctt | caggaaaccg | agactaa | 717 |

Seq ID 23

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|------------|------|
| atggtagcga | aaaaaacagt | acgatcttat | aggtcttcat | tttctcattc | cgtaatagta | 60 |
| gcaatattgt | cagcaggcat | tgcttttgaa | gcacattcct | tacacagctc | agaactagat | 120 |
| ttaggtgtat | tcaataaaca | gtttgaggaa | cattctgtct | atgttgaaga | ggctcaaaca | 180 |
| tctgttttaa | agggatcaga | tcctgtaaat | ccctctcaga | aagaatccga | gaagggtttg | 240 |
| tacactcaag | tgccctcttac | ccaaggaagc | tctggagaga | gtttggatct | cgccgatgct | 300 |
| aatttcttag | agcattttca | gcactctttt | gaagagacta | cagtatttgg | tatcgatcaa | 360 |
| aagctgggtt | ggtcagattt | agatactagg | aatttttccc | aaccactca | agaacctgat | 420 |
| acaagtaatg | ctgtaagtga | gaaaatctcc | tcagatacca | aagagaatag | aaaagacctc | 480 |
| gagactgaag | atccttcaaa | aaaaagtggc | ctaaagaag | tttcatcaga | tctccctaaa | 540 |
| agtcctgaaa | ctgcagtagc | agctatttct | gaagatcttg | aaatctcaga | aaacatttca | 600 |
| gcaagagatc | ctcttcaggg | tttagcattt | ttttataaaa | atacatcttc | tcagtctatc | 660 |
| tctgaaaagg | attcttcatt | tcaaggaaat | atcttttctg | gttcaggagc | taattcaggg | 720 |
| ctaggttttg | aaaatcttaa | ggcgccgaaa | tctggggctg | cagtttatcc | tgatcgagat | 780 |
| attgtttttg | aaaatcttgt | ttaaaggattg | agttttatat | cttgtgaatc | tttagaagat | 840 |
| ggctctgccg | caggtgtaaa | cattgttggtg | accattgtg | gtgatgtaac | tctcactgat | 900 |
| tgtgccactg | gttttagacct | tgaagcttta | cgtctggtta | aagatttttc | tcgtggagga | 960 |
| gctgttttca | ctgctcgcaa | ccatgaagtg | caaaataacc | ttgcagggtg | aattctatcc | 1020 |
| gttgtaggca | ataaaggagc | tattgttgta | gagaaaaata | gtgctgagaa | gtccaatgga | 1080 |
| ggagcttttg | cttgccgaag | ttttgtttac | agtaacaacg | aaaacaccgc | cttgtggaaa | 1140 |
| gaaaatcaag | cattatcagg | aggagccata | tcctcagcaa | gtgatattga | tattcaaggg | 1200 |
| aactgtagcg | ctattgaatt | tcaggaaac | cagtctctaa | ttgctcttgg | agagcatata | 1260 |
| gggcttacag | attttgtagg | tggaggagct | ttagctgtct | aaggagcgtc | taccttaaga | 1320 |
| aataatgcag | tagtgcaatg | tgttaaaaac | acttctaaaa | cacatggtgg | agctatttta | 1380 |
| gcaggtaactg | ttgatctcaa | cgaaacaatt | agcgaagttg | cctttaagca | gaatacagca | 1440 |
| gctctaactg | gaggtgcttt | aagtgcaaat | gataagggtta | taattgcaaa | taactttgga | 1500 |
| gaaattcttt | ttgagcaaaa | cgaagtggag | aatcacggag | gagccattta | ttgtggatgt | 1560 |
| cgatctaate | ctaagttaga | acaaaaggat | tctggagaga | acatcaatat | tattggaaac | 1620 |
| tccggagcta | tcactttttt | aaaaaataag | gcttctgttt | tagaagtgat | gacacaagct | 1680 |
| gaagattatg | ctggtggagg | cgctttatgg | gggcataatg | ttcttctaga | ttccaatagt | 1740 |
| gggaatattc | aatttatagg | aaatataggt | ggaagtacct | tctggatagg | agaatatgtc | 1800 |
| ggtggtgggtg | cgattctctc | tactgataga | gtgacaattt | ctaataactc | tggagatgtt | 1860 |
| gtttttaaag | gaaacaaagg | ccaatgtctt | gctcaaaaat | atgtagctcc | tcaagaaaca | 1920 |
| gctcccgtag | aatcagatgc | ttcatctaca | aataaagacg | agaagagcct | taatgcttgt | 1980 |
| agtcatggag | atcattatcc | tcctaaaaact | gtagaagagg | aagtgccacc | ttcattgtta | 2040 |
| gaagaacatc | ctggtgtttc | ttcgacagat | attcgtgggtg | gtggggccat | tctagctcaa | 2100 |
| catatcttta | ttacagataa | tacaggaaat | ctgagattct | ctgggaacct | tgtgtgtgtg | 2160 |
| gaagagtctt | ctactgtcgg | tgatttagct | atcgtaggag | gaggtgcttt | gctttctact | 2220 |
| aatgaagttta | atgtttgcag | taaccaaaat | ttgttttttt | ctgataacgt | gacttcaaat | 2280 |
| ggttgtgatt | cagggggagc | tatttttagct | aaaaaagtag | atatctccgc | gaaccactcg | 2340 |
| gttgaatttg | tctctaattg | ttcagggaaa | ttcgggtggtg | ccgtttgcgc | tttaaacgaa | 2400 |

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|--------------|-------------|------------|-------------|-------------|-------------|------|
| tacagtaaaaca | ttacggacaa | tggctcggca | gtatcattct | ctaaaaatag | aacacgtctt | 2460 |
| ggcgggtgctg | gagttgcagc | tcctcaagge | tctgtaacga | tttgtggaaa | tcagggaaac | 2520 |
| atagcattta | aagagaactt | tgtttttggc | tctgaaaatc | aaagatcagg | tggaggagct | 2580 |
| atcattgcta | actcttctgt | aaatattcag | gataacgcag | gagatatcct | atttghtaagt | 2640 |
| aactctacgg | gatcttatgg | aggtgctatt | tttgtaggat | ctttggttgc | ttctgaaggc | 2700 |
| agcaaccac | gaacgcttac | aattacaggc | aacagtgggg | atatcctatt | tgtaaaaat | 2760 |
| agcacgcaaa | cagccgcttc | tttatcagaa | aaagattcct | ttggtggagg | ggccatctat | 2820 |
| acacaaaacc | tcaaaattgt | aaagaatgca | gggaacgttt | ctttctatgg | caacagagct | 2880 |
| cctagtgggtg | ctgggtgtcca | aattgcagac | ggaggaactg | tttgtttaga | ggcttttggg | 2940 |
| ggagatatct | tatttgaagg | gaatatcaat | tttgatggga | gtttcaatgc | gattcactta | 3000 |
| tgcgggaatg | actcaaaaat | cgtagagctt | tctgctgttc | aagataaaaa | tattattttc | 3060 |
| caagatgcaa | ttacttatga | agagaacaca | attcgtggct | tgccagataa | agatgtcagt | 3120 |
| cctttaagtg | ccccttcatt | aatttttaac | tccaagccac | aagatgacag | cgctcaacat | 3180 |
| catgaaggga | cgatacgggt | ttctcgaggg | gtatctaaaa | ttcctcagat | tgtgtctata | 3240 |
| caagagggaa | ccttagcttt | atcacaaaac | gcagagcttt | ggttggcagg | acttaaacag | 3300 |
| gaaacaggaa | gttctatcgt | attgtctcgg | ggatctatct | tccgtatttt | tgattcccag | 3360 |
| gttgatagca | gtgcgcctct | tcctacagaa | aataaagagg | agactcttgt | ttotgccgga | 3420 |
| gttcaaatta | acatgagctc | tcctacaccc | aataaagata | aagctgtaga | tactccagta | 3480 |
| cttgagata | tcataagtat | tactgtagat | ttgtcttcat | ttgttctctga | gcaagacgga | 3540 |
| actcttctct | ttcctctctga | aattatcatt | cctaagggaa | caaaattaca | ttctaattgcc | 3600 |
| atagatctta | agattataga | tcctaccaat | gtgggatag | aaaatcatgc | tcttctaagt | 3660 |
| tctcataaag | atattccatt | aatttctctt | aagacagcgg | aaggaaatgac | agggacgcct | 3720 |
| acagcagatg | cttctctatc | taatataaaa | atagatgtat | ctttaccttc | gatcacacca | 3780 |
| gcaacglatg | gtcacacagg | agtttggctt | gaaagtaaaa | tggaaagatgg | aagacttgta | 3840 |
| gtcggttggc | aacctacggg | atataagtta | aatcctgaga | agcaaggggc | tctagttttg | 3900 |
| aataatctct | ggagtcatta | tacagatctt | agagctctta | agcaggagat | ctttgtctcat | 3960 |
| catacagtag | ctcaaagaat | ggagttagat | ttctcgacaa | atgtctgggg | atcaggatta | 4020 |
| ggtgttgttg | aagattgtca | gaacatcgga | gagtttgatg | ggttcaaaaca | tcatctcaca | 4080 |
| gggtatgccc | taggcttgga | tacacaacta | gttgaagact | tcttaatttg | aggatgtttc | 4140 |
| tcacagttct | ttggtaaaac | tgaagccaa | tcctacaaag | ctaagaacga | tgtgaagagt | 4200 |
| tatatgggag | ctgcttatgc | ggggatttta | gcaggtcctt | ggttaataaa | aggagctttt | 4260 |
| gtttacggta | atataaacia | cgatttgact | acagattacg | gtactttagg | tatttcaaca | 4320 |
| ggttcattgga | taggaaaagg | gtttatcgca | ggcacaaagca | ttgattaccg | ctatatgtta | 4380 |
| aatcctcgac | ggtttatctc | ggcaatcgta | tcacacagtg | ttccttttgt | agaagccgag | 4440 |
| tatgtccgta | tagatctctc | agaaattagc | gaacagggtg | aagaggttag | aacgttccaa | 4500 |
| aaaactcggt | ttgagaatgt | cgccattcct | tttggatttg | ctttagaaca | tgttatctcg | 4560 |
| cgtggctcac | gtgctgaagt | gaacagtgtg | cagcttgctt | acgtctttga | tgtatatcgt | 4620 |
| aagggacctg | tctctttgat | tacactcaag | gatgctgctt | attcttggaa | gagttatggg | 4680 |
| gtagatatct | cttgtaaaag | ttggaaggct | cgtctgagca | ataatacggg | atggaattca | 4740 |
| tatttaagta | cgtatttagc | gtttaattat | gaatggagag | aagatctgat | agcttatgac | 4800 |
| ttcaatgggt | gtatccgtat | tattttctag | | | | 4830 |

Seq ID 24

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| atgctaataca | agctatggcg | agctacttat | gaagggatgt | atacatttct | tgtgggtgcg | 60 |
| ttgctaaggt | tgcgctaccg | tatgcaagtt | gaagggtggg | acaccttaaa | cataaatcct | 120 |
| aagcaggggg | gtttgtttct | tgccaatcac | gttgacgaag | tggaccctat | tatcttagaa | 180 |
| tatctatttt | ggagtcgatt | ccatgttcgt | cccattggcg | tcgagtattt | gtttcatagt | 240 |
| cgcgttggtc | aatggttttt | aaattctgta | agatccatcc | ctatccctca | acttgttccc | 300 |
| ggtaaaagaga | gtaagcgctc | tttagaacgt | atgaacgtat | gttatgaaga | agcctcacga | 360 |
| gctttaaata | gaggggaaag | cctccttctt | tatccttcag | gaaggttatc | gagaacaggg | 420 |
| aaagaggaaa | tcgttaatca | gtattctgct | tatgtgttat | tacatagagt | tatggaatgc | 480 |
| aacgtgggtt | tagtcagagt | ttcaggctta | tgggggagtg | cgttttcgcg | ctataagcag | 540 |
| aactctacac | ctaagttagg | ccctgcgttt | aaagaagctt | ttcgagcttt | actgcgtcgt | 600 |
| gggatttttt | ttatgcctaa | aaggtttgta | aaaattactc | tatgtcaagt | agatcatctt | 660 |
| tttttaagac | aattttcaac | aaaacaagac | ctaaataact | ttttggcttc | ttggtttaat | 720 |
| caaggagatg | acaatttgcc | catagaagtt | ccttacgcac | aa | | 762 |

Seq ID 25

| | | | | | | |
|------------|------------|-------------|-------------|-------------|------------|-----|
| atgatcaata | aagaattaga | tattgggtatt | ttaggaaaaa | ttgctggggc | tattaaacaa | 60 |
| attagtattg | aatccatcca | aaaggcctct | tctggtcatc | caggacttcc | cctaggatgc | 120 |
| gcagaacttg | ctgcctattt | atatggttat | gtcctgcggc | aaaatccacg | tgatcccat | 180 |
| tggattaata | gggatcggtt | tgtcttgctc | gcaggatcatg | gatctgytct | tctctattct | 240 |
| tgtttgcatc | ttgccggatt | tgatgtttcc | ttagaggatc | ttcagggaatt | tcgccagctt | 300 |
| cactccccga | ctccccggca | ccccaggtac | ggcgaaactg | tgggagtcga | agcaacgaca | 360 |

| | | | | | | |
|-------------|------------|------------|-------------|------------|------------|------|
| ggctcctctgg | gacagggatt | aggcaatgct | gtcggcatgg | cgctctctat | gaagatgttg | 420 |
| gaatcccgat | tcaatcgccc | aggacatgag | atttttaacg | gaaaaatcta | ttgtttggca | 480 |
| ggggatggct | gttttatgga | gggagtcagc | cacgaagttt | gtagctttgc | aggetcttta | 540 |
| aatttaaata | atcttgtggt | catctatgac | tacaataatg | ttgttctcga | tggatatctt | 600 |
| aatgaaatta | gtgttgagga | tacaaaaaaa | cgttttgaag | cctatggctg | ggatgtatat | 660 |
| gaaattgatg | ggtatgattt | tacccatatt | catgagacat | tctcgagcat | caaacggggg | 720 |
| caggaaacgtc | ctgtattagt | gattgcacat | acaattattg | gtcatgggtc | gcctaaggaa | 780 |
| gggacaaata | aggtcatggt | ttctccttta | ggagtcgaag | ggactcatga | aacaaaacag | 840 |
| ttttggcatc | tccctgaaga | aaagtttttt | gtccctcctg | cagtaaagaa | cttctttgct | 900 |
| cataaaatac | aagaagatcg | aaaagcacag | gagcaatggc | tggatgaagt | tctgttttgg | 960 |
| tcaaaacagt | tcccagaatt | acacgaagaa | ttcgttgcgt | tgacctctca | taagttacct | 1020 |
| aaaaacttag | aatccttggt | gcagagtgtg | gaaatgccag | actctatagc | tggccgggct | 1080 |
| gcttcaaata | aactgatcca | agtattagta | cagcacattc | cttatttgat | tggagggtcc | 1140 |
| gcagatcttt | caagctcaga | tggaaacttg | attgcgaatg | agaaagtcac | ccatacgtat | 1200 |
| gacttctctg | gaaggaacat | taaatacggc | gttcgtgagt | ttggatggc | cacaatcatg | 1260 |
| aatgggttag | cttatagcca | ggtatttcgt | ccttttgggtg | gaacattttt | agttttttct | 1320 |
| gactatatgc | gtaatgcaat | tgccttggcc | gcattatcta | aattaccagt | catctatcaa | 1380 |
| tttaccatg | attctatatt | tgttgagaa | gatggaccta | cgcacagcc | tgtggaacaa | 1440 |
| ttgatgtctt | tgcgcgcgat | ccctggattg | tatgtaatac | gtcctgccga | tgctaataaa | 1500 |
| gttagaggag | cgtggattgc | aggattaaag | cacacaggtc | ctacagtcac | tgtcttgcg | 1560 |
| cgacaagcat | tgcccacact | gcctgctgcg | catcggcctt | ttaaagatgg | tgtaggctcg | 1620 |
| ggtgcttata | ttgtcttaaa | agagtcagga | gaaaaaccag | actatactct | cttcgctaca | 1680 |
| gggtcagaag | tttctttage | tctttctgta | gctaaagaac | tccaacactt | ggataagcaa | 1740 |
| gtgcgtgtag | tttctttccc | ttgttgggag | ctttttgaag | ctcaagatgt | ggactacaaa | 1800 |
| cagagtattg | tagggcgaga | tcttggaaat | cgtgtctcta | tagaagcagg | atctgctttg | 1860 |
| gggtgggtata | agtatatcgg | atctgaaggt | ttagctatcg | ctatggatag | attcggatac | 1920 |
| tcaggagcct | ctgatgatgt | atcagaagaa | tgtggcttta | ctacagagca | aatccttcag | 1980 |
| aggattctct | ctcaatag | | | | | 1998 |

Seq ID 26

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|------------|------|
| atgtctacca | tgcaaaattg | tccacatttt | ggtgtatgtg | gaggatgctc | gtttcctcag | 60 |
| ttccaattatt | ctgactcctt | aaagaaaaag | gaagaactcc | ttcatcagtt | attcgtctct | 120 |
| ttagtccct | cggatgatgat | tgctcctatc | atcccagttt | ctccctcttt | aagaggaaga | 180 |
| aataaaatgg | aattctcctt | ttttcaaact | tatgaaggag | aaaaaagttt | aggattcatc | 240 |
| agctctacaa | aaccaaagaa | aggaattcca | gtgactacat | gtctgcttat | ccatgagcag | 300 |
| actatggata | ttttaaaact | cactcgcgaa | tgggtgggata | agcaccacaga | gcttatggcg | 360 |
| tacttcccc | ctaaaaacaa | aggctcggtta | tgcacactca | ccgtccgtac | ggggagcccc | 420 |
| cagcaaaact | ttatggtgat | cctaacaaca | tcaggaaactc | cagaatatag | ggtaaacgaa | 480 |
| gcctgtatag | atgaatggaa | agagattctc | ctatcgtctt | ctctaaacat | agcatcgatc | 540 |
| tattgggaag | aaaaggtagc | tgacgtggg | atttctacat | attatgaaac | taaactgcta | 600 |
| tacggagccc | cctcgatata | gcaaaaactg | tccttaccta | gtgacggtaa | ctctgcctct | 660 |
| tttagtttgc | gtcccagaag | tttcttccaa | cctcagatta | ctcaggcagc | gaaaattata | 720 |
| gaaactgcga | aagagtttat | aaaccccgag | ggttcggaaa | cgcttcttga | tctctattgt | 780 |
| ggagcaggaa | ctatagggat | tatgctctct | ccctatgtca | aaaatgtgat | tggcgttgag | 840 |
| attattcctg | atgctgtagc | ttcggctcag | gagaacatca | aagcgaataa | caaagaagat | 900 |
| tgcgtagaag | tctatttaga | agatgcgaaa | gcgttctgca | aaaggaatga | aaattgtaaa | 960 |
| gctcctgatg | tcattattat | tgatccccca | cgttgtggta | tgcaaagtaa | agtacttaaa | 1020 |
| tatattttac | gtataggatc | tccaaaaatt | gtctatatct | cttgcaaccc | taaaacacag | 1080 |
| tttcaagagt | gcgcggacct | aatctctggg | ggatatcgca | taaaaaagat | gcagcctatt | 1140 |
| gaccaatttc | cctattcgac | gcacctagaa | aattattatt | tactagaaaag | agagatcgat | 1200 |
| ctctag | | | | | | 1206 |

Seq ID 27

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| atgacatcag | gagtttagtg | aagttcaagt | caggatccca | cattggctgc | gcaattggca | 60 |
| caatcctctc | aaaaagcagg | aaatgctcag | agcggtcacg | atactaagaa | tgtaacaaag | 120 |
| caaggggctc | aagcagaagt | cgctgctgga | ggctttgagg | atctcattca | agacgcttca | 180 |
| gcgcaaagta | caggaaaaaa | agaagctaca | tcttcaacta | ctaaaagtag | taaggagaa | 240 |
| aaaagcgaaa | aatctgggaa | atctaaatcc | tcaacttcgg | tagcaagcgc | aagtgaact | 300 |
| gcaacggcac | aagcgtaca | aggctctaag | ggattaagac | aaaataatta | tgactacccc | 360 |
| agccttccat | ctcctgagc | acagaccatc | aatggatttg | tacttaaaaa | aggcatgggt | 420 |
| acgttagcac | tcctcggttt | agttatgacc | ttgatggcca | atgctgcggg | agagtcttgg | 480 |
| aaagcttcat | tccaatcaca | aaaccaagcg | atccggtcac | aagtcgaatc | cgctcctgct | 540 |
| attggagaag | ctattaaaag | gcaagcgaac | catcaagcat | cagctacaga | agcagaggca | 600 |
| aaacagtcct | tgattagtgg | tattgtaaac | attgtaggat | ttacagtttc | tgtaggagcg | 660 |

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|------------|------|
| ggtattttct | ctgctgcaaa | aggagctacc | tcggctttta | aatctgettc | ctttgccaaa | 720 |
| gaaacaggtg | cctcagctgc | tggaggtgct | gcttccaaaag | ctttaacttc | tgcaagttct | 780 |
| tctgttcaac | agactatggc | ttcgactgcc | aaggcggcaa | caacagcagc | gagttctgcy | 840 |
| ggatcagcag | ccaccaaagc | tcagcgaac | ctaaccgatg | atatggccgc | agcagcttca | 900 |
| aaaatggcct | ctgatggagc | ttcgaaagct | tcaggaggac | tctttggcga | agtcttaaat | 960 |
| aaacctaact | ggtctgaaaa | agttctccaga | ggtatgaacg | tagtgaaaaac | tcagggagcg | 1020 |
| cgtgttgcat | catttgccagg | aaatgctctt | tcttctctta | tgcaaatgag | tcaattaatg | 1080 |
| catggactca | cagcggctgt | tgaaggtctt | tctgcggggc | agacaggaat | agaagtgcgc | 1140 |
| catcatcagc | ggttagcagg | acaagcagag | gctcaagcag | aagttctgaa | acaaatgtct | 1200 |
| tcggtttatg | tcagcaagc | aggacaagca | ggacaattac | aagagcaagc | tatgcaatca | 1260 |
| tttaatactg | ccttacaac | actacaaaat | attgcggact | ctcaaacaca | aacaacatct | 1320 |
| gctatcttta | attaa | | | | | 1335 |

Seq ID 28

| | | | | | | |
|-------------|------------|-------------|-------------|------------|-------------|------|
| atgagtatag | tcagaaatc | tgcattgcc | cttcogtgtt | taagcagatc | cgaaaccttt | 60 |
| aaaaaagtta | ggctgcata | gaaatttatg | aaagtcctta | ctccatggat | ttatcgaaaa | 120 |
| gatctttggg | taacagcatt | cttactgaca | gcaattccag | gatcttttgc | acataactctt | 180 |
| gttgatatag | caggagaacc | tcggcatgct | gctcaagcaa | caggagtttc | tggagatggg | 240 |
| aaaattgtta | taggaatgaa | agttccggat | gatccttttg | ctataactgt | aggatttcaa | 300 |
| tatatgtatg | ggcatttgca | acccttagag | gcagtacgtc | ctcaatgtct | tgtataccct | 360 |
| aatgggtataa | ccccggacgg | aacggttatt | gtgggtacaa | actatgccat | cgggatgggt | 420 |
| agtgttgctg | tgaattgggt | aaatggcaag | gtttctgaac | ttcccatgct | ccctgacacc | 480 |
| ctcgattctg | tagcatcggc | agtttctgca | gatggaagag | tgattggagg | gaatagaaat | 540 |
| ataaatcttg | gcgcttctgt | tgctgtgaaa | tgggaggacg | acgtgattac | acaacttctt | 600 |
| tctcttcttg | atgctatgaa | tgcttgtgtt | aacggaattt | cttcagatgg | ttctataaatt | 660 |
| ctaggaacca | tggttagcgt | gtcatggaga | aataccgcag | tacaatggat | cggggatcag | 720 |
| ctctctgtta | ttgggacttt | aggaggaaact | acttctgttg | ctagtgaat | ctcaacagat | 780 |
| ggcactgtga | ttgtaggagg | ttctgaaaat | gcagattctc | agactcatgc | ctatgcttat | 840 |
| aaaaacggtg | ttatgagcga | tatagggacc | ctcggaggtt | tttattcttt | agcacatgca | 900 |
| gtatcttcag | atggttctgt | gattgttagga | gtatccacga | actctgagca | tagatatcat | 960 |
| gcattccaat | atgctgatgg | acagatggta | gatttaggaa | ctttaggagg | gcctgaatct | 1020 |
| tatgctcaag | gtgtgtctgg | agatggaaaag | gtaattgtgg | gtagagcaca | agtaccatct | 1080 |
| ggagattggc | atgcgttctt | atgtcctttc | caagctccga | gcctgtctcc | tgtccatggg | 1140 |
| ggaagcactg | tcgtaactag | ccagaatcca | cgtggaatgg | tagatatcaa | tgctacgtac | 1200 |
| tctcttttga | aaaatagcca | acaacaacta | caaagattgc | ttatccagca | tagtgcaaaa | 1260 |
| gttgaaagtg | tatcctcagg | agcaccatct | tttacaagtg | tgaaaggtgc | gatctcaaaa | 1320 |
| cagagccctg | cagtgcacaa | tgatgtacag | aaagggacgt | ttttaagtta | ccgttcccaa | 1380 |
| gttcatggaa | acgtgcagaa | tcagcaattg | ctcacaggag | cttttatgga | ctggaaactc | 1440 |
| gcttcagctc | ctaaatggcg | ctttaaagta | gctctccact | atggctctca | agatgctctc | 1500 |
| gtagaacgtg | cagctcttcc | ttacacagaa | caaggcttag | gaagcagtgt | cttgtcaggt | 1560 |
| tttggaggac | aagttcaagg | acgctatgac | tttaatttag | gagaaactgt | tgttctgcaa | 1620 |
| ccctttatgg | gcattcaagt | tctccacctc | agttagagaag | ggtattctga | gaagaatgtt | 1680 |
| cgatttctctg | taagctatga | ttctgtagcc | tactcagcag | ctactagctt | tatgggtgcy | 1740 |
| catgtatttg | ctcctctaag | ccctaaaatg | agtacagcag | caactttagg | tgtggagaga | 1800 |
| gatctgaatt | cacatataga | tgaatttaag | ggatccgtct | ctgctatggg | aaactttgtc | 1860 |
| ttggaaaatt | ctacagtgg | tgttttaaga | ccttttgctt | ctcttgctat | gtactatgac | 1920 |
| gtaagacaac | agcaactcgt | gacgttgtca | gtagttatga | atcaacaacc | cttaacaggc | 1980 |
| acactaagct | tagtaagcca | aagtagctat | aatcttagct | tctaa | | 2025 |

Seq ID 29

| | | | | | | |
|-------------|------------|-------------|------------|------------|-------------|-----|
| atgtttcgtt | gcatattggt | tggatattttc | ctactcacgt | gtttttcttc | tggcgggggtg | 60 |
| ttatattact | tattctgttc | ccatgatttt | tctatagggc | ctaaggaaaa | atcacgatcc | 120 |
| gtgtggattg | aggaagaaaa | agagttcacg | gattccgtat | tacatcatct | gccatcgcaa | 180 |
| catcagcatt | tgcatattct | ttgtttccaa | gggtttttac | tacagaagca | acaaaagttt | 240 |
| tctcaagcag | aaaagatttt | ctctaaagt | tacgacgagg | ctcaggacgg | tccttttctt | 300 |
| tttaaggagg | aaatttttag | atccccactg | atcaacagtt | tttttttaga | aaaaacagac | 360 |
| gtcatggaga | ccattctttg | tcttctgaat | cagcgtgtc | ccaactcccc | ttactaccac | 420 |
| ttattttaagg | ctctagtatg | ctataagcaa | aagctatacc | gtgaggtcat | agagcaacta | 480 |
| gcctactggc | aagaagagaa | aactcgagcg | cttgcctcct | tattgaatat | aagtattgaa | 540 |
| cagctgctaa | cagattttct | gttagattat | atttctgcgc | attctctgat | agaacagaaa | 600 |
| atgttccccg | aagcgagagt | aattcttaat | cgaatatca | ataggttatt | aaaacacgaa | 660 |
| tgtgagtgg | atgcgaagac | atacgtcgt | attgcgattc | ttcttagccg | gagttatttt | 720 |
| ctagagttgg | tagaatctaa | gtctgcagat | attttatttg | attattatga | gatgggtgct | 780 |
| ttctatctca | aaaagatcta | tatttttagag | cagtgctcct | atgcagaact | tctccccgag | 840 |

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|------|
| gaagagcttg | tttccttgat | tatggaacac | gtgtttatcc | ttcctaaaga | taaattatat | 900 |
| cctttaattc | agctcctaga | gatgtggcag | aagcattatg | ttcacccaaa | tagttcttta | 960 |
| gtagttcaga | tattggtaga | ccgcttttct | acacatatgg | aaggggctat | tcgggtttgt | 1020 |
| gaggctttag | tttctttctc | tggattggaa | gaattacatc | agcaaattat | taccactttt | 1080 |
| gaagagctgc | tttcaataaa | agtacagcag | ataaaaactg | aagaggctaa | acaatgtgtt | 1140 |
| gccctacttc | atatatttga | tccttctatt | tccttagtg | aaaaattagc | tctttcttcg | 1200 |
| gatacattac | aaaatatagt | ttctggggac | gacgagcagc | atacaaaact | ccgcaattac | 1260 |
| ctagatcttt | gggaagccat | acagtcttat | gatattgatc | gccaacagct | cgttcatcac | 1320 |
| ttagtttatg | gtgcaaaaaga | tctttggaaa | aaaggaggaa | atgatgaaaa | ggcattgaac | 1380 |
| cttcttcagc | tggtcttgag | gtttacaagc | tacgatatag | aatgcgaaag | tggtgtgttt | 1440 |
| ctttttataa | aacaggcgta | taagcaagca | ctgtcttccc | atgccattgc | togtctttta | 1500 |
| aagttagaaa | aatttatatc | ggaagcgaat | attccctcta | tagtgattag | tgaggctgag | 1560 |
| aaggccaatt | tcttagcaga | tgctgaatat | ctttttgctc | atgaagacta | tgacaaatgc | 1620 |
| tatttgtata | gcattgtggt | gactaagggt | gccccctccc | ctcaatccta | tcgcttagca | 1680 |
| gggttatgcc | tgatggaaaa | taagcgttac | gacgaagctt | tagaatttct | ctgtatgctc | 1740 |
| tcaccaata | atagtatcaa | cgactataag | acgcagaagg | cattagcatt | ttgccaaaaa | 1800 |
| catcaatcta | aggaccgagc | tgctcttag | | | | 1830 |

Seq ID 30

| | | | | | | |
|-------------|-------------|------------|------------|------------|------------|------|
| atgttgggca | aagaagaaga | gtttacgtgt | aaacaaaagc | agtgtttgtc | acattttgtt | 60 |
| accaatctga | cgctccgatgt | atttgcctta | aaaaatcttc | cagaagtcgt | taagggagct | 120 |
| ttattttcta | aatactcccg | ttcagtttta | ggtttgcgag | cacttttgtt | aaaagaattt | 180 |
| ctatctaata | aagaggatgg | agatgtttgt | gacgaagcct | atgacttcga | aaccgatgta | 240 |
| cagaaagctg | cggactttta | ccaaagggtt | cttgataatt | ttggggatga | ttctgtagga | 300 |
| gagcttggcg | gagccacact | ggctatggaa | aatgtctcta | ttttggctgc | taaagtttta | 360 |
| gaggatgtgc | gaattggcgg | atccccgcta | gaaaagtcca | caagatacgt | ctatttcgat | 420 |
| caaaagggtac | ggggggagta | tttatattac | cgagacccta | ttttgatgac | ttcgcccttt | 480 |
| aaagacatgt | ttttgggtac | ttgtgatttt | ttattcgata | cctattctgc | tttaatccct | 540 |
| caagttcgtg | cctattttga | aaaactgtat | cctaaagatt | ctaaaacacc | cgcatctgcc | 600 |
| tatgccacat | cattacgagc | taaagtttta | gattgtatac | ggggacttct | tctgcgga | 660 |
| actttgacaa | atctaggatt | tttcggtaac | ggtaggtttt | ggcaaatct | gattcacaa | 720 |
| ttacaaggta | ataaccttgc | agagttgcga | cgtttaggag | atgaatccct | aacagagctt | 780 |
| atgaaagtta | ttccttcatt | tgtaagtaga | gccgagcctc | atcatcacca | tcataagct | 840 |
| atgatgcaat | atcgaagagc | tttaaaagag | cagctcaagg | gacttgctga | acaagcaaca | 900 |
| tttagtgagg | agatgtcttc | ttcacccagc | gttcagttgg | tatacggaga | ccctgatggc | 960 |
| attttataag | tagctgctgg | atttcttttt | ccttattcaa | atcgttctct | tacagatctc | 1020 |
| atagactatt | gtaaaaaaat | gcctcatgaa | gatcttgta | agattttaga | gagcagtggt | 1080 |
| tctgcaagag | aaaaccgccc | gcataagctc | cctcgtgggt | tagaatgcgt | agaatttggc | 1140 |
| tttgatatac | ttgtgatttt | cggtgcatac | cgcgatttgc | aacgacatcg | gacgctgact | 1200 |
| caagaacgac | agttactctc | tacacatcat | ggatacaatt | ttcctgtgga | gcttctagat | 1260 |
| actcctatgg | aaaaatctta | tcgagaagct | atggagaggg | cgaatgaaac | ctataatgag | 1320 |
| attgttcagg | agttccctga | ggaagctcag | tatatggttc | ccatggctta | caatatacgt | 1380 |
| tggtttttcc | atgtaaatgc | tcgggctttg | caatggattt | gtgagttacg | ctcacagcct | 1440 |
| agaggtcatc | aaaattaccg | cactatagct | acaggtttag | tgcgagaggt | tgtaagtttc | 1500 |
| aatcctatgt | acgaattatt | tttcaaattt | ctgacattat | ctgacataga | tttaggacgg | 1560 |
| ttaaatcagg | aaatgcgaaa | agaaccaacg | acctaa | | | 1596 |

Seq ID 31

| | | | | | | |
|------------|------------|------------|------------|------------|------------|----|
| cgctgatga | aggcagtggt | ctctcacaag | agcaggacct | cctctataca | caggcagtag | 60 |
| agctcttatt | ctttatttta | cagcatcctc | aag | | | 93 |

Seq ID 32

| | | | | | | |
|------------|------------|------------|------------|------------|------------|----|
| gacggagtta | attttgga | tttttccag | ccgtgccctt | actgcagagg | caaatatcca | 60 |
| agtccaactt | gcacaagcac | gttatctcct | tctcgtct | | | 99 |

Seq ID 33

| | | | | | | |
|------------|------------|------------|------------|------------|------------|----|
| ggcttacgac | ggttttgcaa | acgatactcc | atagtagtat | cggaaagtgg | agagcctttc | 60 |
| tgcttactca | agaaaaaaa | gatctttttg | | | | 90 |

Seq ID 34

| | | | | | | |
|------------|------------|------------|------------|-------------|-------------|-----|
| aacttcccaa | tctgtgatag | aagttccaga | ttcagagggg | attgcagaga | cgaggatctc | 60 |
| tgcggaagaa | atcgatacga | ggctttccct | gacgacaaga | cagaagggtca | tctttgctct | 120 |
| tgcgacactc | ttgctcttag | caagtattgc | tgcttccata | gtcacgggat | ttgggtggatt | 180 |
| gacagtcacg | caagttctcc | ttgttgcttc | tgtaggacg | gcggttgctt | ctgtaaacact | 240 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-----|
| ccctatgggtt | tcctcaggat | tttctacgt | cgctaccaa | ctgaaagcaa | gattgaatat | 300 |
| cag | | | | | | 303 |
| Seq ID 35 | | | | | | |
| tttcttcctg | tggtgccggg | attattacta | ggctctcctt | tacctcagat | gtcgttcaga | 60 |
| ttg | | | | | | 63 |
| Seq ID 36 | | | | | | |
| tttttcataa | aatattctct | ttcaaacgga | tatgggattc | aaaaatatct | gcaaacaagg | 60 |
| ctctcagcta | tacctgaatg | gcatttttcc | ggaacgaata | ctagctcgaa | aattaaaaaa | 120 |
| ctgtgcgaag | agctatccca | gaactgctct | taccatagaa | gtactggtat | cctcgggtctt | 180 |
| aggagctct | | | | | | 189 |
| Seq ID 37 | | | | | | |
| tgcagctact | ctgtttactc | actatggagc | ctctacaac | ttttgatgct | gatgaaatca | 60 |
| gaaaagaaaa | aatcaaaatt | cttcaacgta | tctcaccatt | ttcagaaggt | tcttcgattg | 120 |
| tccgaggaca | atatgggtcca | ggaacgggtc | aaggagtctc | ggctcttggc | tatcgtgaag | 180 |
| aagagaatgt | tgacaaagat | tcccag | | | | 207 |
| Seq ID 38 | | | | | | |
| gcacaagcgt | tcgggagcct | actcctcagg | atgcta | | | 36 |
| Seq ID 39 | | | | | | |
| gagctactca | tttctacca | gagaaaaaca | agctcagcta | ttggaaaaaa | gaactttacg | 60 |
| accagctcgc | agtgt | | | | | 75 |
| Seq ID 40 | | | | | | |
| gaagggaagag | aagatcttcc | atcagcactt | aggaaaggca | gccccacaag | cggcaacagc | 60 |
| aacttcagga | gtgcagccta | ctgcggatcc | tggtgc | | | 96 |
| Seq ID 41 | | | | | | |
| cgccttagga | gtacaacaaa | cacctcccag | tcaagtcctc | aatgggattg | cactcatect | 60 |
| atctatttat | gtgatgttcc | ccacgggagt | ggctatgta | | | 99 |
| Seq ID 42 | | | | | | |
| gctccccaag | cccgggggtga | caccaagatc | agaggttatc | gaaatcggac | tcgcgcttgc | 60 |
| Seq ID 43 | | | | | | |
| ggacgcttac | tgaacagtg | tatgctatca | agcttgcgca | aatggctggc | tatactacaa | 60 |
| ttattttctca | tcgctcagga | gaaactacgg | acactacgat | tgcagatctt | gctgttgctt | 120 |
| tcaacgctgg | tcaaatcaaa | acaggctctt | tatcacgttc | tgagcgtgtt | gcaaaataca | 180 |
| atagactcat | ggaattgaa | gaagagcttg | gatccgaagc | aattttcaca | gattctaattg | 240 |
| tattttctta | cgaggattct | gaggaataga | gggattttct | ctattttctat | cttatctcca | 300 |
| aatcaagaat | acatcgaga | tctatgggccc | ttatctttc | | | 339 |
| Seq ID 44 | | | | | | |
| agcacaatc | caacagttgc | tctcgcatca | atatttgatg | caaaaactac | aaaatgtcca | 60 |
| Seq ID 45 | | | | | | |
| accgacatac | tcgtcaaatt | cattaagaac | atcttcccac | ccctgtggag | aggtaattgtc | 60 |
| gtaccccgca | gcaaaaatat | gacaagtatc | tacacacacg | ccaatgggaa | tttgattttt | 120 |
| caaattctga | acgaggtaac | ccaattcttc | aaagttactc | ccaat | | 165 |
| Seq ID 46 | | | | | | |
| tcttctcgct | gtacacaacg | agaaattgct | gggaggagaa | cggtaaacac | accaaagcca | 60 |
| aagagatgta | tggggagc | | | | | 78 |
| Seq ID 47 | | | | | | |
| attgatgcca | cccagatcaa | ccttaatgcc | tcccaagttg | acattcacat | taggaaccac | 60 |
| agtagctcct | actggagtgc | caggacctgt | atgagacgtc | gagtgagccc | ctccacctgg | 120 |
| agtttcatatt | ataaaggaga | agtctggagc | tggggctcgtt | ttccagttaa | tgcttttcaa | 180 |
| gcccccaaca | tcataccaaa | tcggacctgt | ttctactttt | gtccacgac | gccatgcaga | 240 |
| gggtgtatat | ccactactag | attctttagc | attccaagga | ccgttagacta | cagcagtttt | 300 |
| aaatttcattg | ctgagcatca | gatgattgta | atttctgtg | gtccccgagc | gtctttccat | 360 |

tgtagggtttt acgcgtcccg tcca 384

Seq ID 48

gcccttttat cacgagcttg tgtggcatca atcataccag ctgtaagtc cgcatacaatc 60
gccatctgtt tacctggcat cgcatacaat cggatccggg cagcaacttc ggcaacacgc 120
tcggcaccct tagttactac gataaac 147

Seq ID 49

aataaggtaa ttacaggatc atggcgagtg ggagcttggt agagcatgga aaccagaaaag 60
ccacctaaat gcttgaaaaa aaaggctcat agggagaaaag ccgtaaacat agagacgata 120
aaggtaacgg cagaaggaaa atcc 144

Seq ID 50

ggcatctctg tgatgatgat gctctcacga tgtttatctt cattctcttc tacatgcaga 60
cgagctcgaa ctttaattct tctctgctct gtagtatacg tggagcgaat tcccttcagaa 120
ccgcagataa ttcctcctgt agggaaatca gggcctggca tgacttgtaa aatctcatcc 180
acagaagcct gtggatttgc aagcagaaga agtgtagctt ctataagttc ccctaaattg 240
tgtgggggga tattcgttgc catcccaaca gcaattcctg aagaaccatt gcaaagaaga 300
ttcggaaatt tagaaggaaa aactacaggc tcgtgttttg tttcatca 348

Seq ID 51

agtggcagaa ttatctccgt catgttgctc gctccaccgt gtgagctgca tagtgacttg 60
atagatcccg acttggttga gtttaaccac aggcctcaata tctgcatatc tgctgaagtc 120
aggggtcgcg ttacgactca cactttttaga ggtgatagct gcaacatgag tttcaattgt 180
agtgttaggg gcaacgtaat aaccattccc aggataatac gtatagagat tcgcagcctg 240
acatccagtt tttctataat aactaaatgt aagcgcctct cgagcagact gaggatcact 300
aatattattg catactggag tttgcgatac gtctgtctta gaatagatat taaaaccgtc 360
agagagtgtg gtagcattaa gttgagaacc ttccgcagac acattaccct tcacaataaa 420
ttcacatgga gaagtcgtgg tatc 444

Seq ID 52

agtgatcgta actctttttc aatctctgtg agtttttcaa aatacgcaga ttttatagca 60
cctctgaact ggagcttaac caccagaagg gcgttcaacc cagtagaagc cgcctcatt 120
cgattttcac attcttcaag agttaggcca gaagttactg ttccagaaat aaggaactca 180

Seq ID 53

atgccttgga ttttctataa acttttcaat ataaacattg gggttattaa aaccggcttc 60
ggctttctgca cgtgcggcag aaaacgctct atagaattcg tccttttctt taacaatacg 120
aattcctctt cccccacctc cagcaacggc ttttaataaca atagggaaac ctattttttc 180
agctatttt 189

Seq ID 54

atttccatgt ctccataga aaccccttct tcaccgacaa cttccatagc cttgcccatt 60
tctgaacctt totctagaaa ctgtgctgct tttttcacag caccaccca gcctgaaacc 120
ttctcttcta aaatttgtcc tacctgggtc aaatattttg accaagaaat caaagggtct 180
attgaaggat acctacgtgc gtcagctcgt gcttttgaaa gaccacagaa cgctccgact 240
acagctaagt tagat 255

Seq ID 55

ggagaccttg aacattataa acacatccat ggaccttttt caaaatcaag ccaccatggc 60
aaacgtcata agcgcacaaa ttatttaatg ttctacagt gtcgatataa gactctatgc 120
ggtgatcagg aatca 135

Seq ID 56

agggtatctt tcaatgcac cccgccgac acaacaagtc gtagggactc caaacaggaa 60
ttttgttttt ttgctgtttt cagaata 87

Seq ID 57

tcaataaacc cactagcacc acagcgttca ttaggccttg ccatacaata ccagctagaa 60
gaatggccga tacaggacac ttcgatttca cgagacctta agcgactttc ctccacaaac 120
acatccgtgt catatagaaa tgcttctgag atcttttctt gtaattctc tttatcaagg 180
actaaaaata tcccaatact agatcccaaa tgtgcagttt ttacaatcat agggaaagaa 240
aatgtctcta taagattc 258

Seq ID 58

ccactaggtc ccgcaccaat aacaacacaa tcaaattctt gggatcatatt ctactcact 60
gtaatcaaga ttcaaaaag aacccccctt cataaatgca tgcattctcat taagaagagg 120
accctgtgct tattt 135

Seq ID 59

ggagaacaac cattcctggt tcatccact tcacagcaaa gtttgtctct gtatcatcac 60
tatataggca ccctacaatc gtctttccat cactggaaac accctctgca aaagattgca 120
ttccctcaga aaatattcca agatcaacaa gtgcaccgtt taccacttc acagcgcggc 180
aagacggatc ttgatccgag attccta 207

Seq ID 60

gtgacatcta agtacgcttc catgctcca tcaattccta atccagcttc acatacacgt 60
aaaatagcac gcgctcctac atctcggtg acaagattcc catacgagg atacatatct 120
tctaagaaat accaaggagc tctgtctct ccacaaggac gttccgaacc atctggaaat 180
actatgctgt ttgaagaatc ccaggcacc cacacacgac cgccctcacc acgcacagac 240
tctgaaatta atcgtagctt atcccttcca ggaattgctg taggg 285

Seq ID 61

MVNPIGPGPIDETERTPPADLSAQGLEASAAANKSAEAQRIAGAEAKPKESKTDSEVERWSILRSVNALMSLADKLGIASS
NSSSTSRSDVDSTTATAPTPPPPTFDDYKTOAQTAAYDTIFTSTSLADIQAALVSLQDAVTNIKDTAATDEETAIAAEW
ETKNADAVKVGAQITELAKYASDNQAILDSLGLTSFDLLQAALLQSVANNKAAELLKEMQDNPVVPGKTPAIAQSLVD
QTDATATQIEKDGNARIDAYFAGQNASGAVENAKSNNSISNIDSAKAATATAKTQIAEAQKKFPDSPILQEAQMVIAE
KDLNLIKPADGSDVPNPGTTVGGSKQQGSSIGSIRVSMLLDDAENETASILMSGFRQMIHMFNTENPDSQAAQQLAAQA
RAKAAGDDSAALADAKALEALGKAGQQQGIILNALGQIASAAVVSAGVPPAAASSIGSSVKLYKTSKSTGSDYKT
QISAGYDAYKSINDAYGRANDATRDVINNVSTPALTRSVPRARTEARGPEKTDQALARVISGNSRTLGDVYSQVSALQS
VMQIIQSNPQANNEEIRQKLTSAVTKPPQFGYPVQLSNDSTQKFIKLESLEFAGSRTAAEKALSFTNSLFIQQVLV
NIGSLYSGYLQ

Seq ID 62

MKKLLKSALLSAAFAGSVGSLQALPVGNPSPDLLIDGTIWEAGAAGDPCDPCATWCDALISLRAGFYGDYVFDRLKVDAP
KTFPMGAKPTGSAAANYTTAVDRPNPAYNKHLDHAEWFTNAGFIALNIWDRFDVFTLGASNGYIRGNSAFNLVGLFV
KGTTVNANELPNVSLNSGVVRLYTDTSFWSVGARGALWECGCATLGAEFQYQSKPKVEELNVCNVSQFSVNPKPKGYK
GVAFPLPTDAGVATATGTSATINYHEWQVGASLSYRLNSLVPYIGVQWSRATFDADNIRIAQPKLPTAVNLNTAWNPSL
LGNATALSTTDSFSDFMQIVSCQINKFKSRKACGVTVGATLVDADKWSLTAEARLINERAHVSGQFRF

Seq ID 63

MSVNPSPGNSKNDLWITGAHDQHPDVKESGVTSANLGSVRVTASGGROGLLARIKEAVTGFFSRMSFFRSGAPRGSQQPSA
PSADTVRSPLPGGDARATEGAGRNLKKGYQPGMKVTIPQVPGGAQRSSGTTLPKPTRPAPPPKTTGKTNAKRPATHGK
GPAPQPPKTTGKTNAKRAATHGKGPAPQPPKILKQPGQSGTSGKKRVSWSDR

Seq ID 64

MGINPSGNRSPDDVWVRGAQGDSSSTQGTGATNSNLGAHNVTSTSQPVASKAKQLWQTVREFFLGKKSPDSSQGASGP
AMQSPSGPTIRPTRPAPPPPTTGGANAKRPATHGKGRAPQPTAGSSSGSEQPTAMSSSEVAKLVSELKDAVHSHAESQKV
LKKVSELQTKWTDWENNRGPDYLLHGYRVIRALQQTYTEQSMLEGTSSSTGVPVQAVTVAKDAVTQTVRGAIKNLENP
KPGNDPDGVLQVVISLQIEGPTLDPGESIQNFLETRVSDFGDDSDIDYTSDIARLGSALDRVRENHPNEMPRIWIALA
RELGAHVSHATSVRIANAGKNHTRDVVRMANESSRLQGMKVLVGAWANTMTVLIGDLFE

Seq ID 65

MKTLWHFVSKAFLSIVGLCCGVVLAFFVIFALIASLNGDATFVSLPDAQGEVKDLGKTAPIIAVIEKMDVIASSKNTA
KTIQNILEGFEKAPLKDVRKGIVIDMDCPGGEVFEIDRIYSMLRFWKERKGFPIIYVNGLCASGGYVSCAATKIYATS
SSLIGSIGVRSGPFNVKEGLNRYGVESDLLTAGKDKAPMNPYPWTSHDREERQATLDFLYGQFVDIVTQNRPLLTKEK
LVHTLGARIFSPKAKQEGYIDVVGATKEQVLQDIVAVCKIEDNYRVIGSGGDGWWKRVASAAASSPLVTGMKHDILPL
SHDAAYIPPYLAL

Seq ID 66

MRPHRKHVSSKSLALKQSASTHVEITTKAFRLSMLKQLILEKSDHLPPMETIRVVLTSHKDKLGTEVHVVAHSGKEILO
TKVHNANPYTAVINAFKIRTMANKHSNKRKDRTHDLGLAAKEERIAIQEEQEDRLSNEWLPVEGLDAWDSLKTLYGYP
ASAKKISKKKMSIRMLSQDEAIRQLESAAENFLIPLNEQEHKIQCIYKKHKGNYVLIPLKPGFCI

Seq ID 67

MAAPINQPSSTTTQITQTGTQTTTTTTSVSLGEHSVTTTSGSAAQTSQTVTLIADHEMQEIASQDGSASVSFAEHSFSTLP
PETGSGVATAQSAQSAGLSLGRGTQRDSEISSSSDSSISRTSSNASSGETSRAESSPDLDLDSLGSERAEAGGEP
EGPGLPESTIPHVDPTDKASILNFKNPAVQKMQTKGGHFVYVDEARSSFIFVRNGDWSTAESIKVSNAKTKENITKP

ADLEMCIAKFCVGYETIHSWDTGRVKPTMEERSGATGNYNHLMLSMKFKTAVVYGPWNAKESSSGYTPSAWRRGAKVETG
 PIWDDVGGLKGINWKTTAPDFSFINETPGGGAHSTSHGTGPGTPVGATVVPNVNVLGGIKVDLGGINLGGITTNVTTRE
 GGGTNIITSTKSTSTDDKVSITSTGSQSTIEEDTIQFDDPGQGEDDNAIPGTNTPPPPGPPPNLSSSRLLTISNASLNQVL
 QNVRQHLNTAYDSNGNSVSDLNQDLGQVVKNSGVNFTVILPKTTGDTDPGQATGGVTEGGGHIRNIQRTQSTGQ
 SEGATPTPQPTIAKIVTSLRKANVSSSVLPQPQVATTTITPQARTASTSTTSIGTGTESTSTTSTGTGTGSVSTQSTGVG
 TPTTTTRSTGTSTATTTTSSASTQTPQAPLPSGTRHVATISLVRNAAGRSIVLQGGGRSQSFPIPPSGTGTQNMGAQLWAA
 ASQVASTLGQVVNQAATAGSQPSSRRSSPTSPRRK

Seq ID 68

MKTSQLFYKTSKNANKSAAVLSNELLEKAGYLFKVSQGVYTYTPLLWRVVSMMNIIREELNAIGQOELLPLLHNAELW
 QHTGRWEAFTSEGLLYTLKDRREGKSHCLAPTHREVICSFVAQWLSKRQLPLHLQYIATKFRDEIRPRFGLIRSRRELLME
 DSYTFSDSPEQMNEQYELRSAYSKIFDRLGLAYVITADGGKIGKSEEFQVLCSLGEDTICVSGSYGANIEAAVSIP
 PQHAYDREFLPVEEVATPGITTIIEALANFFSIPHLKILKTLVVKLSYSNEEKFAIGMRGDRQVNLVKVASKLNADDIAL
 ASDEBIHRLVGTGKGFIPNLCPIDFFADETTPMTNFVCAGNAKDKHYVNVNWDRLDLPQYGFLLAEEGDTCPENPG
 HPYRIYQGIEVAHIFNLGTRYTDSFEVNFQDEHGQTOQCWMGTYGIGVGRTLAACVEQLADDRGIVWPKALAPFSITIAF
 NGGDTVSQELAEFTIYHELQSQGYEPLDDRDERLGFKLKSDILIGIPYKLILGKSYQSSGIFEIESRSGEKYTVSPEAF
 TWCQNHLA

Seq ID 69

MASGIGSSGLKIPPKDNGDRSRSPSPKGELGSHEISLPPQEHGEGASGSSSHIHSSSSFLPEDQESQSSSSAASSPGF
 FSRVRSVDRALKSGFNGFFSAESTSQARETROAFVRLSKTITADERRDVSSSSAAATEARVAEDASVSGENPSQGVPTS
 SGPEPQRLFSLPSVKKQSGLRVQTVRDRIVLPSGAPPTDSEPLSLYELNLRSLSLRQELSDIQSNDQLTPEEKAEATV
 TIQQLIQITEFQCGYMEATQSSSVSLAEARFKGVETSDEINSLCSELTDPQLQELMSDGDLSLQNLDDTADDLEAALSHAR
 LSFSLDDNPTPIDNNPTLSQEBPIYEEIGGAADPORTRENWSTRLWNQIREALVSLGMLSLILGSLHLRLRIARHAAA
 EAVGRCTCRGEECTSSEEDSMSVSGSPSEIDETERTGSPHDVPRRNGSPREDSPLMNALVGWAHKGAKTKESSESSTPE
 ISISAPIVRGWSQDSSVSFIVMEDDHIFVDVPRRKDGIYDVPSSPRWSPARELEEDVFGDYEVPIITSAEPSKDKNIYMT
 RLATPAIYDLPSRPGSSGSSRSPSSDRVRSSSPNRGGVPLPPVPSAMSEEGSIYEDMSGASGAGESDYEDMSRSPSPRG
 DLDEPIYANTPDNPFTQNRIDRILQERSGGASASPVPEIYDEIPWIHGRPPATLPRPENTLTNVSRLVSPGFGPEVRAA
 LLSBSVSAMVVEAESIVPTEPGDGESEYLEPLGLVATTCKILLQKGWPRGESNA

Seq ID 70

MRFFCFMGLLPFTFVLNAGLQPLLETITLSPEYQAAPOVGFTHNQNDLAIVGNHNDFILDYKYRSNGGALTCKNLL
 ISENIIGNVFFKNCVCPNSGGAIYAAQNCITISKQNYAFTTNLVDNPTATAGSLGALFAINCSTNNLQGGTFVDNLA
 LNKGGALYTETNLSIKDNKGPIIIKQNRALNSDSLGGIYSGNSLNIEGNSGAIQITSNSSGSGGGIFSTQTLTISNKK
 LIEISENSAFANNYGSNFPNGGGGLTTTCTILNREGVLFNQNSQSNNGGAIHAKSIIKENGVPVYFLNNTATRGALL
 NLSAGSGNGSFLSADNGDIIFFNNNTASKHALNPPYRNAIHSTPNMNLQIGARPGYRVLFYDPIEHELPSFPILFNFET
 GHTGTVLFSGEHVHQNFTDEMNFSSYLRTSELRQGVLAEDGAGLACYKFFQRGGTLLLGQAVITTAGTIPTPSSTPT
 TVGSTITLNLHIAIDLPSILSFQAQAPKIWIYPTKTGSTYTEDSNPTITISGTLTLRNSNNDPYSLDLSHSLEKVPPLLY
 IVDVAAQKINSSQLDLSTLNSGEHYGYQGIWSTYVETTTITNPTSLLGANTKHKLILYANWSPLGYRPHPERRGFTITNA
 LWQSAYTALAGLHLSLSSWDEEKGAASLQIGIGLVHVKDKNGFKGFRSHMTGYSATTEATSSQSPNFSLGFAQFFSKAKE
 HESQNSTSSHVYFGMCIENTLFKEWIRLSVSLAYMFTSEHTHTMYQGLLEGNSQGSFHNHTLAGALSCVFLPQPHGESL
 QIYPPITALAIRGNLAAFQESGDHAREFSLHRPLTDVSLPVGIRASWKNHHRVPLVWLTEISYRSTLYRQDPHELHKLIL
 SQGTWTTQATPVTYNALGIKVKNTMQVFPKVTLSLDYSADISSSTLSHYLNVASRMRF

Seq ID 71

MKSSLHWFLISSSLALPLSLNFSFAAFAVVEINLGPNTSFGSGPGTYTPPAQTTNADGTIYNLTGDVSITNAGSPTALTASC
 FKETTGNLSFQGHGYQFLLQNDIDAGANCTFTNTAANKLLSFGFSYLSLIQTNTATTGTGAIKSTGACSIQSNYSCYFGQ
 NFSNDNGGALQGSISLSLNPNTLFAKNKATQKGGALYSTGGITINNTLNSASFSENTAANNNGGAIYTEASSFISSNKAI
 SFINNSVTATSATGCAIYCSSTSAPKPVLTLSDNGLNFIGNTAITSGGAITYDNLVLSGGPTLFKNNSAIDTAAPLGG
 AIAIADSGSLSLALGDDITFEQNTVVKGASSQTTRNSINIGNTNAKIVQLRASQGNTIYFYDPIITTSITAALSDALN
 LNPDLAGNPAYQGTIVFSGEKLSAEAAEADNLKSTIQQPLTLAGGQLSLKSGVTLVAKSFSQSPGSTLLMDAGFTLET
 ADGTTINNLVLNVDLSKETKKATLKATQASQTVTLSSLSLVDPSGNVYEDVSWNNPQVFSCLTLTADDPANIHITDLAA
 DPLEKNPIHWGYQGNWALSQWEDTATKSKAATLTWTKTGYNPNPERRGTLVANTLWGSFVDVRSIQQLVATKVRQSQETR
 GIWCEGISNFFHKDSTKINKGFRHISAGYVVGATTTLASDNLITAAFCQLFGKDRDHFINKNRASAYAAASHLQHLATLS
 SPSLLRYLPGESESEQVLFDAQISYIYSKNTMKTYTQAPKGESSWYNDGCALELASSLPHTALSHEGLPHAYFPFIKVE
 ASYIHQDSFKERTTLVRSFDSGLINVSVPIGITFERFSRNERASYEATVIYVADVYRKNPDCTTALLINNTSWKTGT
 NLSRQAGIGRAGIFYAFSPNLEVTNSLSMEIRGSSRSYNADLGGKQF

Seq ID 72

MFEKFTNRAKQVIKLAKKEAQRNLNHNLYGTEHILLGLLKLQGGVAVNVLRNLGIDFDTARQEVEERLIGYGPFIQVYGDPA
 LTGRVKSFSANEAEALLENHYVGTGHEHLLGLHQSVALQVLENLHIDPREVRKEILKELETFNQLPSSSSSSSSSS
 SRSNPSSSKSPLGHSLSGDKNEKLSALKAYGYDLTMEVRESKLPVIGRSEVERLILILCRRRKNPVLIEAGVGTGA
 IVEGLAQKIIILNEVPDALRKKRLITLDLALMIAGTKYRGQFERIKAVMDEVVRKHGNILLFIDELHTTVGAGAAEGATA
 SNILKPALARGEIQICIGATTIDEYRKHIEKDAALERRFQKIVVHPPSVDETIEILRGLKKKYEHHNVFITEALKAAAT

LSDOYVHGRFLPDKAIDLLDEAGARVRVNTMGQPTDLMKLEAEIENTKLAKEQAIGTQEYEKAAGLRDEEKKLRERLQSM
KQEWENHKEBHQPVDKEAVAQVVSLOTGIP SARL TEAESEKLLKLEDTLRRKVIGQNDAVTSICRAIRRSRTGIKDPNR
PTGSFLFLGPTGVGKSLLAQQAIEFMFGGEDALIQVDMSEYMEKFAATKMMGSPPGYVVGHEEGGHLTEQVRRRYPYCVVLF
DEIEKAHPDMDLMLQILEQGRITDSFGRKVDFRHAIIMTSNLGADLIRKSGEIGFGLKSHMDYKVIQEKIEHAMKKHL
KPEFINRLDESIVFRPLEKESLSEIHLINKLDSRLKNYQMALNIPDSVISFLVTKGHSPMGARPLRRVIEQYLEDP
AELLKESCRQEARLRLATLVENRVAFEREEEEEQEAALPSPHLES

Seq ID 73

MGLQSRQLQHCTIEVSQNSNFDSQVKQFIYACQDKTLRQSVLKI FRYHPLLLKIHDIA RAVYLLMALEEDEDGLSFLNVQOY
PSGAVELFSCGGFPWKGLPYPAEHAEFGLLLQIAEFYEESSQAYVSKMSHFQQALEDHQGSVPFSLWSQNSRLLEKETT
LSQSFLFLQGMQIHPEYSLEDPALGFWMQTRSSSAFVAASGCQSSLGAYSSGDVGVIAYGPCSGDISDCYFFGCCGIAK
EFVCQKSHQTTETISFLTSTGKPHRNTGFSYLRDSYVHLPIRCKITISDKQYRVHAALAEATSAMTFSIFCKGKNCQVVD
GPRLRSCSLDSYKGPNDIMILGENDAINIVSASPYMBIFALQKKEKFWNADFLINIPYKEEGVMLIFBKVKVTESEKGRFF
TKMN

Seq ID 74

MTKIAFSEKAKNFPVEALKKWFENKRSIPWRDNPTPYSVWVSEVMLQQTRAEVVIDYFNQWMERFPTIESLAAAKBEDV
IKLWEGLGYYSRARHILLEGARMVMEEFHGKIPDDAISLAQIRGVGYTVHAILAFAFKRRAAAVDGNVLRVLSRI FLIET
SIDLESTRTWVSRIAQALLPHKSPEVIAEALIELGACTCKKVPQCHRCVPVRQACGAWRENKQFVLPVRHARKKVI FLHRL
VAIVLYDGSILVVEKRRPKEMMAGLYEFPYIEVEPEEGLQDIEGFTKKMELSLESPLFLGNLKEQRHAFTNHKVLCPIT
FKATSLPQFGELHLLSDIDHLAFSSGHKKIKDALLIYLGDVRSRESIGV

Seq ID 75

MAVSGGGGVQPSDDPGKWNPALQGEQAEGPSPLKESIFSETKQASSAAKQESLVRSGSTGMAYATESQINKAKYRKAQDRS
STSPKSKLKGTFKMRASVQGFMSGFGSRASRVSAKRASDSGEGTSLLPTEMDVALKKGNRISPQMGGFFLDASCMGGSS
SDISQLSLEALKSSAFSGARSLSLSSSESSSVASFGSFQKAEFPMSEKVNAWTVARLGEMVSSLLDPNVETSSSLVRRRA
MATGNEGMIDLSDLGQEEVSTAMTSPRAVEGKVKVSSSDSPKANPTGIPNSNTLERAKEAEKQESREQLSEDQMMLARA
MAGLLTGAAPQEVLSNSVWSGPSTVFPFPKFSGLTPTQSGDKSKHKSPGIEKSTNHTNFSPLREGTVKSAEVSLSLPHPE
SMYRFPKDSIVSREEPEAVVKESTAFKNPENSSQNFPLIAVESVFPKESGTGGALGSDAVSSSYHFLAQRGVSLAPLPR
ATDDYKEKLEAHKGPGGPPDPLIYQYRNVAVEPPIVLRSPQPFSGSSRLSVQGGKPEASVHDDGGGNSGGFSGDQRRGS
SGQKASRQEKKGKLLSTDI

Seq ID 76

MKRRSWLKILGICLGSSIVLGFLIFLPQLLSTESGKYLVPFSLIHKESGLSCSAEELKISWFGRTARKIKLTGEAKDEVF
SAEKFELDGSLRLLIYKPKGITLSGWSLKINEPASIDHPSVSHLDPGSILLTYLNDCKIIEHGFITMKTVSGSSLSVS
GFYLEKSSEKMTKCVSEDDQSGNIFIESVLPDVSISAQFSSVPVAFKIFIASPFWDHLLSYEDIINLSABATHNTD
GKISMTASGEGNQIQMLQGHIIKSTFYIVEGSSFIELKPELASALCNQIIPLSTPITSQIHLATVSYAKIPLDITKWK
HIEITSQAQLPEVAIHPKDPNLALQLRDTKLGIKTEKFSDIRYSSSTVLGGASPSHLNGLISIDNKKHLTKFRLQQAQL
PHTYLRAIFPQPFVINVLVDVAYYSLNIEGTYKNAHLEADAILDNPLLLKSCMSGAWKNFLFKGGQTYHFNKKWQELLS
PHFSYAEARFSGKAQITDNLFFPKFSKITARENELIHAKEFGSPNEPIKPETTSILIHGQFCSLPLSLVSNHLPAPHL
KKLTFSFHTDGGKFVTKGNLQALIEPNPDYDLNTRILIPDLLSLDESSTSPSSKDLKIQSGEISFLPLDSITKTYGK
QVRLSPYFGSSGDLNLFVNNYKPDQNKLTLLSNFKSEALLGELKLVMDFSMKLSSGTQGTLOWEVSPERYASFFKNASC
PTCLLHRTANVRDLISKLSCEETKGLSCLTLAAGLEGSLSEATPLIFDYNVSKETFIINDFKGSLRANLDAKTEYDL
KGSCLAPRODSKTLAEFSLEGQVDHLFSPESREBKQTANWIHIPSSFIAGIIPMSPLKAQISSLAGPRINVSINKNAFRF
GEGPVDIMVDSENLAQIPLILNEKSILLRENLTALHSINEDVNKAFLQEFNPLLAGGAYSQYPTLEIDKQNFYLPPIRP
YSFEFRIQSATLDMGKISANTGTMYALFQFLDITDQKQFVESWFTPIFFSVQKGSIIICKRXDALIDRRIRLALWGKTD
IAHRLFMTLGIDPEVIKYYFHNTSLKTKNFLLIKIRGSISSPEVDWSSAYARIALLKSYSLGNPFSSSLADKLFFSSLGDS
TPPPTVHPFPWEKSNFDSIENK

Seq ID 77

MSSPVNNTSPAPNIPAPITPTGIPPTKPRSSFIEKVIVAKYILFAIAATSGALGTILGLSGALTPGIGIALLVIFVVS
MVLGLGLIKDSISGGEERRLREEVSRFTSENQRLTVITTTLETVEKDLKAAKQDLTLBIEAFRNENGNLKTAEEDLEEQV
SKLSEQUEALERINQLIQANAGDAQBISSELKLLISGWDSKVVEQINTSIQALKVLLGQEWVQEAQTHVKAMQEQIQALQ
AELGMHNQSTALQKSVENLLVQDQALTRVVGELLESENKLSQACSALRQETIEKLAQHETSLQQRIDAMLAQEQNLAEQV
TALBKMKEAQKAESEFIACVRDRTFGRRETTPPTTPVVEGDSQEEDGGTTPVSPSSPVDRATGDGQ

Seq ID 78

MRYDPNLIKWKQFQWKEHRSFQANEDEDKVYVLDMPFYPGAGLHVGHLYGTATDIVARYKRARGFSVLHPMGWDS
FGLPAEQYAIRTGTHPKVTQKNIANFKKQLSAMGFSYDEGREFATSDPDYHHTQKLFLLYDQGLAYMADMAVNYCPE
LGTVLSNEEVENGFSIEGGYPVERKMLRQWILKITAYADKLLEGLDALDWPENVKQLQKNWIGKSEGALVTFLHTQEGSL
EAFTRRLDTLLGVSLFVIAPEHPDLDSIVSEEQRDEVTAYVQESLRKSERDRISSVKTKTGVTGNVYAKHPITGNLLPVV
ISDYVVLGYGTGVVMGPAHDERDREFAEMFSLPIHEVIDDNGVCIHSNYNDFCLNGLSGQEAQDYVINYLEMRSLGRAK
TMYRLRDWLF SRQRYWGEPIPIIHFEDGTHRPLEDEDELLPPNIDDYRPEGFGQPLAKAQDWVHIYDEKTRPGCRET
YTMPQWAGSCWYYLRFCDAHNSQLPWSKEKESYWMPVDLYIGGAHVAHLHLYSRFWHRVFDYDAGLVSTPEPFKKLINQG

KDMFLGTCDFLFDYTSALIPQVRAYFEKLYPKDSKTPASAYATSLRAKVLDCTIRGLLPAATLTNLGFFGNGRWFQNLHKK
LQGHNLAEIIRRLGDESLTELMKVIPSFVSRAEPHHHHQAMMQYRRALKEQLKGLAEQATFSEEMSSSPSVQLVYGD PDG
IYKVAAGFLFPYSNRSLTDLIDYCKKMPHEDLVQILESSVSARENRRHKS PRGLECVFEGFDILADFGAYRDLQRHRTL
QERQLLSTHHGYNFFVELLDTPMEKSYREAMERANETYNEIVQEFPEEAQYMPMAYNIRWFFHVNARALQWICELRSQP
QGHQNYRTIATGLVREVVKFNPMYELFKFVDYSDIDLGRNLNQE MRKEPTT

Seq ID 91

RVMKAVVSHKSR TSSIHROYSSYSLFYSILK

Seq ID 92

DGVNFGNLFQPCPYCRGKYPSTCTSTLSPSSS

Seq ID 93

GLRRFCKRYSIVVSESGEFPCLLKKKKIFL

Seq ID 94

NFPICDRSSRFRGDCRDEDL CGRNRYBAFPDDKTEGHLCSCTIALSKYCCLHSHGIWWIDSHASSPCCFCRIGGCFCNT
PYGFLRIFLRLPTESKIEYQ

Seq ID 95

FLPVLPGLLLGPPLPQMSFRL

Seq ID 96

FFIKYSLNNGYGIQKYLQTRL SAIPewHfSGTNTSSKIKKLCEELSONCSYHRSTGILGLRSS

Seq ID 97

CSYSVYSLWLLQLMLMKSEKKKSFFNVSHHFQKVLRLSEDNMVQERFKESRSLAIVKKRMLTKIPE

Seq ID 98

AQAFGSLLLRML

Seq ID 99

ELLISYQRTSSAIGKKNFTTSSQC

Seq ID 100

EGREDLP SALRKGSPTSGNSNFRSAAYCGSCC

Seq ID 101

RLRSTTNTSQSSPQWDC THPIYLCDVPHGSGYV

Seq ID 102

APQARGDTKIRGYRNRTRAC

Seq ID 103

GRLLKQCM LSSLRKWLAILQLFLIAQEKLRTLRLQI LLLPSTLVKSKQALYHVLSVLQNTIDSWKLKSLDPKQFSQILM
YFLTRILNRNGIFSISILSPNQEYIADLWALS F

Seq ID 104

STNPTVALASIFDAKTTKCP

Seq ID 105

TDILVKFIKNIFFPLWRGNVVP RSKNMTSIYTHANGNLIFQILNEVTQFFKVTPN

Seq ID 106

SSRCTQREIAGRRTVNTPKPKRCMGS

Seq ID 107

IDATQINLNASQVDIHIRNHSSSYWSARTCMRRRVSPSTWSFYIKGEVWSWGRFPVNAFQAPNIIPNRTC FYFCSTTPCR
GCISTTRFFSIPRTVDYSSFKFHAHQMIIVISCGSRALFHC RFYASRP

Seq ID 108

ALLSRACVASIIPARKSASIAICLP GIASNRNRAATSATRSAPLVT TIN

Seq ID 109

NKVITGSWRVGACESMETRKPPKCLKKKVDREKAVNIETIKVTAEGKS

Seq ID 110

GISVMMMLSRCLSSFSSTCRRARTLIFPRFVVYVERIPSEPQIIPFVGKSGPGMTCKISSTEACGFASRRSVASISSPKL
CGGIFVAIPTAIPPEEPLQRRFGNLEGKTTGSCFVSS

Seq ID 111

SGRIISVMLSAPPCELHSDLIDPDLFEFNHRLNICISAEVRGRVTHTFRGDSNMSFNCSVRGNVITIPRIIRIETIRSL
TSSFSIITKCKRISSRLRITNIIAYWSLRYVCLRIDIKTVRECSSIKLRTFRRHITLHNKFTWRSRGI

Seq ID 112

SDRNSFSISVSFSKYADFIAPLNWSLRTTRAFNPVEAALIRFSHSSRVRPVTVPEIRNS

Seq ID 113

MPWIFYKLFNINIGVIKTGFGECTCGRKRSIEFVLFFNNTNSSSPTSSNGFNNNRETYFFSYF

Seq ID 114

ISMSSIETPSSPTTSIRLPISEPFNRNCAAFFTAPPQPETFSSKICPTWFKYFDQEIKGSIEGYLRASARAFAFERPQNAPT
TANVD

Seq ID 115

GDLEHYKHINGPFSKSSHGKRHRHNYLMFLQCRYKTL CGDQES

Seq ID 116

RVSFNASPPITTSRRDSKQEFCEFAVFRI

Seq ID 117

SINPLAPQRS LGPAIQYQLEEWPIQDTSISRDPKRLSSTNTSVSYRNASEIFSCNSSLRTKNIPILDPKCAVFTIIGKE
NVSIRF

Seq ID 118

PLGPAPITTQNSWVIFSLTVIKISKRTPLHKCMHLIKKRTLCLF

Seq ID 119

GEQPFLFHPTSQQSLSLYHHYIGTLQSSFHHWKHPLOKIAFPQKIFQDQQVHRLPTSQRGKTDLDPRFL

Seq ID 120

VTSKYASMRPSIPNPASHTRKLIARAPTSRLTRFPYAGYISSKKYQGAPVSPQGRSEPSGNTMRFEESPGTHTRPPSPRTD
SEINRSLSLPGIavg